



This File Contains Programs According G TU Syllabus (S10002). It Doesn't Contain All The Listed Programs. If Program Doesn't Generate Any Code Then Person Who Execute The Program Is Responsible and Amn't Able To Claim.

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HIREN VYAS

1) Write a program to print “Hello World” message.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    clrscr();

    printf("\n \"Hello World\"");

    getch();
}
```

Output:

“Hello World”



2) Write a program to print Name, Address and Birth Date.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    clrscr();

    printf("\n Name : IYAN");
    printf("\n Address : London");
    printf("\n Birth Date : 10-13-09");

    getch();
}
```

Output:

Name: IYAN

Address: London

Birth Date:10-13-09



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3) Write a program to Add, Multiply and Divide two integers and float numbers.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int x,y;
    float a,b;
    clrscr();

    printf("\n Arithmetic operation on integer:-");
    printf("\n\n Enter 1st integer number : ");
    scanf("%d",&x);

    printf(" Enter 2nd integer number : ");
    scanf("%d",&y);

    printf("\n\n Addition of two integer numbers is   : %d",x+y);
    printf("\n Multiplication of two integer numbers is : %d",x*y);
    printf("\n Division of two integers numbers is     : %d",x/y);

    printf("\n\n Arithmetic operation on float:-");
    printf("\n\n Enter 1st float number : ");
    scanf("%f",&a);

    printf(" Enter 2nd float number : ");
    scanf("%f",&b);

    printf("\n\n Addition of two float number is :%.2f",a+b);
    printf("\n Multiplication of two float number is :%.2f",a*b);
    printf("\n Division of two float number is :%.2f",a/b);

    getch();
}
```

Output:

Arithmetic operation on integer:-

Enter 1st integer number : 14

Enter 2nd integer number : 2

Addition of two integer numbers is : 16

Multiplication of two integer numbers is : 28

Division of two Integers numbers is : 7

Arithmetic operation on float:-

Enter 1st float number : 8

Enter 2nd float number : 2

Addition of two float number is : 10.00

Multiplication of two float number is : 16.00

Division of two float number is: 4.00

4) Write a program to convert Rupees (float) to paisa (int).

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    float rs=0;
    int ps=0;
    clrscr();

    printf("\n\n Enter rupees to convert into paisa : ");
    scanf("%f",&rs);

    ps=rs*100;

    printf("\n Paisa of given rupees is %d",ps);

    getch();
}
```

Output:

Enter rupees to convert into paisa : 12.00

Paisa of given rupees is 1200

5) Write program to accept number of days and print year, month and remaining days.

```
# include < stdio.h >  
# include < conio.h >
```

```
void main ()
```

```
{
```

```
    int d=0,m=0,y=0,x;  
    clrscr();
```

```
    printf("\n\n Enter number of days : ");  
    scanf("%d",&x);
```

```
    while(x>=365)  
    {  
        y++;  
        x=x-365;  
    }
```

```
    while(d>=30)  
    {  
        m++;  
        x=x-30;  
    }  
    d=x;
```

```
    printf("\n\n Year(s) : %d",y);  
    printf("\n\n Month(s) : %d",m);  
    printf("\n\n Day(s) : %d",d);
```

```
    getch();
```

```
}
```

Output:

Enter number of days : 500

Year(s) : 1

Month(s) : 0

Day(s) : 135



6) Write program to check whether the entered number is PRIME or not.

```
# include < stdio.h >  
# include < conio.h >
```

```
void main ()
```

```
{
```

```
    int i,n,flag=0;  
    clrscr();
```

```
    printf("\n Enter the number : ");  
    scanf("%d",&n);
```

```
    for(i=2;i<n;i++)
```

```
    {
```

```
        if(n%i==0)
```

```
        {
```

```
            flag=1;  
            break;
```

```
        }
```

```
    }
```

```
    if(flag==0)
```

```
    {
```

```
        printf("\n %d is a Prime number",n);
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("\n %d ia not a Prime number",n);
```

```
    }
```

```
    getch();
```

```
}
```

Output:

Enter the number : 4

4 is not a Prime number

Enter Number : 7

7 is a Prime number



7) Write a program to check whether the entered number is EVEN or ODD.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int n;
    clrscr();

    printf("\n Enter the number : ");
    scanf("%d",&n);

    if(n%2==0)
    {
        printf("\n Entered number %d is EVEN",n);
    }
    else
    {
        printf("\n Entered number %d is ODD",n);
    }

    getch();
}
```

Output:

Enter the number : 1

Entered number 1 is ODD

Enter the number : 2

Entered number 2 is EVEN

8) Using While loop print 1 2 3 4 5 10.

```
# include < stdio.h >  
# include < conio.h >
```

```
void main ()  
{  
  
    int n=1;  
    clrscr();  
  
    while(n<=10)  
    {  
        printf(" %d ",n);  
        n++;  
    }  
    getch();  
}
```

Output:

1 2 3 4 5 6 7 8 9 10

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9) Print series 2, 4, 6, 8,.....,n.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int i,n;
    clrscr();

    printf("\n Enter the number : ");
    scanf("%d",&n);

    printf("\n");

    for(i=2;i<=n;i++)
    {
        if(i%2==0)
        {
            printf(" %d ",i);
        }
    }

    getch();
}
```

Output:

Enter the number : 14

2 4 6 8 10 12 14

10) Print series 2, 4, 16,.....,n*n using shorthand operator and while loop.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int n,x;
    long double i=2;
    clrscr();

    printf("Enter the number : ");
    scanf("%d",&n);

    printf("\n");

    x=1;
    while(x<=n)
    {
        printf("%.2Lf\n",i);
        x++;
        i*=i;
    }

    getch();
}
```

Output:

Enter the number : 4

2.00
4.00
16.00
256.00

11) Write a program to generate Fibonacci series.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int n1=0,n2=1,n3=1,n,i;
    clrscr();

    printf("Enter the Number : ");
    scanf("%d",&n);

    printf("\n");
    for(i=1;i<=n;i++)
    {
        printf(" %d ",n3);
        n3=n1+n2;
        n1=n2;
        n2=n3;
    }
    getch();
}
```

Output:

Enter the Number : 5

1 1 2 3 5

12) Write a program to print the multiplication table.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int i,j,n;
    clrscr();

    printf("Enter the number : ");
    scanf("%d",&n);

    for(i=1;i<=10;i++)
    {
        printf("\n %2d * %2d = %2d",n,i,i*n);
    }

    getch();
}
```

Output:

Enter the number : 9

```
9 * 1 = 9
9 * 2 = 18
9 * 3 = 27
9 * 4 = 36
9 * 5 = 45
9 * 6 = 54
9 * 7 = 63
9 * 8 = 72
9 * 9 = 81
9 * 10 = 90
```


13) Write a program to find factorial of the entered number.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int i,n,f=1;
    clrscr();

    printf("\n Enter the Number : ");
    scanf("%d",&n);

    for(i=1;i<=n;i++)
    {
        f=f*i;
    }

    printf("\n The factorial of %d is : %d",n,f);

    getch();
}
```

Output:

Enter the Number : 5

The factorial of 5 is : 120

14) Write a program to print all the numbers and sum of all the integers that are greater than 100 and less than 200 and are divisible by 7.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int i,sum=0;
    clrscr();

    for(i=100;i<200;i++)
    {
        if(i%7==0)
        {
            printf(" %d ",i);
            sum=sum+i;
        }
    }

    printf("\n\n Sum of all above integers that are divisible by 7 is  %d",sum);

    getch();
}
```

Output:

105 112 119 126 133 140 147 154 161 168 175 182 189 196

Sum of all above integers that are divisible by 7 is 2107

15) Write a program to find the roots of an equation $ax^2 + bx + c = 0$.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>

void main ()
{
    float a,b,c,alf,bt,dlt;
    clrscr();
    printf("\n Enter a: ");
    scanf("%f",&a);
    printf("\n Enter b: ");
    scanf("%f",&b);
    printf("\n Enter c: ");
    scanf("%f",&c);
    dlt=b*b-4*a*c;
    if(dlt==0)
    {
        printf("\n ALPHA=BETA=%f",-b/(2*a));
    }
    else if(dlt<0)
    {
        printf("\n Imaginary Roots");
    }
    else
    {
        alf=(-b+sqrt(dlt))/(2*a);
        bt=(-b-sqrt(dlt))/(2*a);
        printf("\n\n Alpha = %f\n Beta=%f\n",alf,bt);
    }

    getch();
}
```

Output:

(1)Enter a: 12

Enter b: 2

Enter c: 34

Imaginary Roots

(2)

Enter a: 2

Enter b: 6

Enter c: 2

Alpha = -0.381966

Beta = -2.618034

(3)

Enter a: 2

Enter b: 4

Enter c: 2

ALPHA=BETA= -1.000000

16) Write a program that accept basic, HRA, and convergence from the user and calculate total salary.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    float basic,HRA,cnvg,totsal;
    clrscr();

    printf("\n Enter basic salary : ");
    scanf("%f",&basic);

    printf("\n Enter HRA : ");
    scanf("%f",&HRA);

    printf("\n Enter convergence : ");
    scanf("%f",&cnvg);

    HRA=(basic*HRA)/100;
    cnvg=(basic*cnvg)/100;
    totsalsal=basic+HRA+cnvg;

    printf("\n\n Total salary is %.2f",totsal);

    getch();
}
```

Output:

Enter basic salary : 3000

Enter HRA : 5

Enter convergence : 2

Total salary is 3210.00

17) Print the following triangle.

```
a b c d e
a b c d
a b c
a b
a
```

```
# include < stdio.h >
# include < conio.h >
void main ()
{
    int i,n,j,k;
    clrscr();

    printf("Enter the number : ");
    scanf("%d",&n);
    printf("\n");
    for(i=0;i<n;i++)
    {
        for(k=1;k<=i;k++)
        {
            printf(" ");
        }
        for(j=1;j<=n-i;j++)
        {
            printf(" %c",96+j);
        }
        printf("\n");
    }

    getch();
}
```

18) Write a program that prints the following Floyd's triangle.

```
1
2 3
4 5 6
7 8 9 10
11 .....15
.
.
79 .....91
```

```
# include < stdio.h >
# include < conio.h >
```

```
void main ()
{
    int i,j,n,k;
    clrscr();

    printf("\n\n Enter the number : ");
    scanf("%d",&n);

    for(i=1,k=1;i<=n;i++)
    {
        for(j=1;j<=i;j++,k++)
        {
            printf(" %d ",k);
        }
        printf("\n");
    }
    getch();
}
```

19) Write a program to find maximum element from 1-Dimensional array.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int a[20],n,i,max=0;
    clrscr();

    printf("\n Enter the number of elements for 1-D array : ");
    scanf("%d",&n);

    for(i=0;i<n;i++)
    {
        printf("\n Enter element [%d] : ",i+1);
        scanf("%d",&a[i]);
    }
    for(i=0;i<n;i++)
    {
        if(max<a[i])
            max=a[i];
    }

    printf("\n Maximum element from above array inserted is : %d",max);
    getch();
}
```

Output:

Enter the number of elements for 1-D array : 5

Enter element [1] : 1

Enter element [2] : 8

Enter element [3] : 2

Enter element [4] : 5

Enter element [5] : 9

Maximum element from above array inserted is : 9

20) Write a program to sort given array in ascending order.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int a[20],i,j,n,temp;
    clrscr();
    printf("\n Enter no. of elements for 1-D array : ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf(" Enter element[%d] : ",i+1);
        scanf("%d",&a[i]);
    }
    for(i=0;i<n;i++)
    {
        for(j=i+1;j<n;j++)
        {
            if(a[i]>a[j])
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
    }
    printf("\n\n Ascending order of inserted array is : ");
    for(i=0;i<n;i++)
    {
        printf("\n %d ",a[i]);
    }

    getch();
}
```

Output:

Enter no. of elements for 1-D array : 5

Enter element [1] : 2

Enter element [2] : 10

Enter element [3] : 4

Enter element [4] : 13

Enter element [5] : 7

Ascending order of inserted array is: 2 4 7 10 13



21) Give the 1-D array A and B, which are sorted in ascending order. Write a program to merge them into a single sorted array C that contains every item from arrays A and B, in ascending order.

```
# include < stdio.h >
# include < conio.h >

void main ()
{
    int a[10],b[10],c[20],n1,n2,i,j,temp,k=0;
    clrscr();

    printf(" Enter the no. of element for 1st array : ");
    scanf("%d",&n1);

    for(i=0;i<n1;i++,k++)
    {
        printf(" Enter element [%d] : ",i+1);
        scanf("%d",&a[i]);
        c[k]=a[i];
    }

    for(i=0;i<n1;i++)
    {
        for(j=i+1;j<n1;j++)
        {
            if(a[i]>a[j])
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
    }

    printf("\n After sorting 1st array : ");
    for(i=0;i<n1;i++)
    {
        printf("\n Element [%d] = %d",i+1,a[i]);
    }
}
```

```
printf("\n\n Enter the no. of element for 2nd array : ");  
scanf("%d",&n2);
```

```
for(i=0;i<n2;i++,k++)  
{  
    printf(" Enter element [%d] : ",i+1);  
    scanf("%d",&b[i]);  
    c[k]=b[i];  
}  
for(i=0;i<n2;i++)  
{  
    for(j=i+1;j<n2;j++)  
    {  
        if(b[i]>b[j])  
        {  
            temp=b[i];  
            b[i]=b[j];  
            b[j]=temp;  
        }  
    }  
}
```

```
printf("\n After sorting 2nd array : ");  
for(i=0;i<n2;i++)  
{  
    printf("\n Element [%d] = %d",i+1,b[i]);  
}  
for(i=0;i<n1+n2;i++)  
{  
    for(j=i+1;j<n1+n2;j++)  
    {  
        if(c[i]>c[j])  
        {  
            temp=c[i];  
            c[i]=c[j];  
            c[j]=temp;  
        }  
    }  
}
```

```
    }

    printf("\n\n After combined and sorted both array :- ");
    for(i=0;i<n1+n2;i++)
    {
        printf("\n Element [%d] = %d",i+1,c[i]);
    }
    getch();
}
```

Output:

Enter the no. of element for 1st array : 5

Enter element [1] : 20

Enter element [2] : 18

Enter element [3] : 6

Enter element [4] : 12

Enter element [5] : 4

After sorting 1st array :

Element [1] = 4

Element [2] = 6

Element [3] = 12

Element [4] = 18

Element [5] = 20

Enter the no. of element for 2nd array : 3

Enter element [1] : 6

Enter element [2] : 2

Enter element [3] : 3

After sorting 2nd array :

Element [1] = 2

Element [2] = 3

Element [3] = 6

After combined and sorted both array :-

Element [1] = 2
Element [2] = 3
Element [3] = 4
Element [4] = 6
Element [5] = 6
Element [6] = 12
Element [7] = 18
Element [8] = 20



22) To find addition of 2 matrices

```
# include < stdio.h >
# include < conio.h >
int main()
{
    int a[15][15],b[15][15],c[20][20],i,j,n;
    clrscr();
    printf("\n Enter the no of row & col:");
    scanf("%d",&n);
    printf("\n\n For the 1st matrix");
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("\n Elements of [%d][%d]:",i,j+1);
            scanf("%d",&a[i][j]);
        }
    }
    printf("\n For the 2nd matrix");
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("\n Elements of [%d][%d]:",i,i+1);
            scanf("%d",&b[i][j]);
        }
    }
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
        {
            c[i][j]=a[i][j]+b[i][j];
        }
    }
    printf("\n\n 1st matrix:");
    for(i=0;i<n; i++) {
        printf("\n\n");
        for(j=0;j<n; j++)
```

```
        {
            printf("%4d",a[i][j]);
        }
    }
    printf("\n\n2nd matrix:");
    for(i=0;i<n;i++)
    {
        printf("\n\n");
        for(j=0;j<n; j++)
        {
            printf("%4d",b[i][j]);
        }
    }
    printf("\n\nSum of two matrix:");
    for(i=0;i<n; i++)
    {
        printf("\n\n");
        for(j=0;j<n;j++)
        {
            printf("%4d",c[i][j]);
        }
    }
    getch();
    return 0;
}
```

Output:

Enter the no of row & col:2

For the 1st matrix

Elements of [0][1]:10
Elements of [0][2]:11
Elements of [1][1]:12
Elements of [1][2]:13

For the 2nd matrix

Elements of [0][1]:14

Elements of [0][1]:15

Elements of [1][2]:16

Elements of [1][2]:17

1st matrix:

10 11

12 13

2nd matrix:

14 15

16 17

Sum of two matrix:

24 26

28 30



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23) To find length of a string without length function.

```
# include < stdio.h >
# include < conio.h >
int main()
{
    char str[20];
    int i,c=0;
    clrscr();
    printf("\n Enter any string: ");
    gets(str);
    for(i=0;i<str[i];i++)
    {
        c++;
    }
    printf("\n No.of characters entered in a string. %d",c);
    getch();
    return 0;
}
```

Output:

Enter any string: mama sita

No. of character in a string. 8

24) To find the size of various datatypes like int,float,double.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>
int main()
{
    int i;
    float f;
    double d;
    clrscr();
    printf("\nSize of int : %d bytes",sizeof(i));
    printf("\nSize of float : %d bytes",sizeof(f));
    printf("\nSize of double : %d bytes",sizeof(d));
    getch();
    return 0;
}
```

Output:

Size of int : 2 bytes
Size of float : 4 bytes
Size of double : 8 bytes

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25) To find the occurrence of a word in an input string.

```
#include <stdio.h>
#include <conio.h>
void main ()
{
    char s1[100],s2[20];
    int i,c=0,j,flag=0;
    clrscr();
    printf("\n Enter any string : ");
    fflush(stdin);
    gets(s1);
    printf("\n Enter any word that u want to search from a input string: ");
    fflush(stdin);
    gets(s2);
    for(i=0;s1[i]!='\0';i++)
    {
        j=0;
        if(s1[i]==s2[j])
        {
            for(j=0;s2[j]!='\0';j++,i++)
            {
                if(s1[i]==s2[j])
                {
                    flag=1;
                }
                else
                {
                    flag=0;
                    break;
                }
            }
        }
        if(flag==1)
        c++;
        flag=0;
    }
    printf("\nWord %s occurs %d times in the string",s2,c);
    getch();
}
```

```
}
```

Output:

Enter any string : hello a world a.

Enter any word that u want to search from a inputed string: a

Word a occurs 2 times in the string



26) Write a program that will read a string and rewrite it in the alphabetic order. i.e. the word **STRING should be written as **GINRST****

```
# include < stdio.h >
# include < conio.h >
# include < math.h >

int main()
{
    char a[20],b[20];
    int i,j,temp;
    clrscr();
    printf("\n Enter any string: ");
    fflush(stdin);
    gets(a);
    strcpy(b,a);

    for(i=0;a[i]!='\0';i++)
    {
        for(j=i+1;a[j]!='\0';j++)
        {
            if(a[i]>a[j])
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
    }

    printf("\n The entered string was: ");
    puts(b);
    printf("\n Reverse of the string is: ");
    puts(a);
    getch();
    return(0);
}
```

Output:

Enter any string: STRING

The entered string was: STRING

Reverse of the string is: GINRST



27) Write a program that append one string to another string.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>
void main ()
{
    char s1[30],s2[30];
    clrscr();
    printf("Enter string 1 : ");
    fflush(stdin);
    gets(s1);
    printf("Enter string 2 : ");
    fflush(stdin);
    gets(s2);
    strcat(s1,s2);
    printf("\nConcatetion of both String : %s",s1);
    getch();
}
```

Output:

```
Enter string 1 : abc
Enter string 2 : def
Concatetion of both String :abcdef
```


28) Write a program to find a given word in a string.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>
void main ()
{
    char str1[50],str2[30],ch;
    int i;
    clrscr();
    printf("\n Enter The String: ");
    fflush(stdin);
    gets(str1);
    printf("\n Enter the string that you want to search: ");
    fflush(stdin);
    gets(str2);
    i=strstr(str1,str2);
    if(i==NULL)
        printf("\n String not found");
    else
        printf("\n String found");
    getch();
}
```

Output:

Enter The String: Ram n Sita

Enter the string that you want to search: n

String found

29) Program of use recursive calls to evaluate
 $f(x) = x - x^3/3! + x^5/5! - x^7/7! + \dots xn/n!$

```
#include<math.h>
```

```
long double fact(long double);
```

```
int main()
```

```
{
```

```
    int x,n,i,j=1,z=0;
```

```
    long double f,ans;
```

```
    clrscr();
```

```
    printf("\n Enter any number : ");
```

```
    scanf("%d",&n);
```

```
    printf("\n Enter the range of x: ");
```

```
    scanf("%d",&x);
```

```
    printf("\nf(%d) = ",x);
```

```
    for(i=1;i<=n;i++,j+=2)
```

```
    {
```

```
        if(i%2!=0)
```

```
        {
```

```
            if(i!=1)
```

```
            printf("+ ");
```

```
        }
```

```
    else
```

```
        printf("- ");
```

```
        f=fact(j);
```

```
        z=pow(x,j);
```

```
        printf("%d/%.0Lf ",z,f);
```

```
        ans=z/f;
```

```
    }
```

```
    printf("\n Answer is %.0Lf",ans);
```

```
    getch();
```

```
    return 0;
```

```
}
```

```
long double fact(long double j)
```

```
{
```

```
    if(j==1)
```

```
    return 1;
```

```
else
{
    j*=fact(j-1);    return j;
}
}
```

Output:

Enter any number : 10

Enter the range of x: 2

$f(2) = 2/1 - 8/6 + 32/120 - 128/5040 + 512/362880 - 2048/39916800 +$
 $8192/6227020$

$800 - -32768/1307674368000 + 0/355687428096000 - 0/121645100408832000$

Answer is 0

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30) Write a function prime that returns 1 if passed argument is prime no. and returns 0 if it is not.

```
# include < stdio.h >
# include < conio.h >
int prime(int b)
{
    int i,c;
    for(i=2;c=1;i++)
    {
        if(b%i==0)
        {
            c=0;
            break;
        }
    }
    if(c==0)
    return 0;
    else
    return 1;
}
int main()
{
    int n,x;
    clrscr();
    printf("\n Enter the value of n:");
    scanf("%d",&n);
    x=prime(n);
    if(x==1)
    {
        printf("\n Entered number is prime number." );
    }
    else
    {
        printf("\n Entered number is not prime number." );
    }
    getch();
    return(0);
}
```

Output:

Enter the value of n:5

Entered number is not prime number.



31) Write a program to print sum of first n numbers.

```
# include < stdio.h >
# include < conio.h >
int main()
{
    int i,n,sum=0;
    clrscr();
    printf("\n Enter value of n: ");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        sum=sum+i;
    }
    printf("Summation of first %d numbers is %d",n,sum);
    getch();
    return(0);
}
```

Output:

Enter value of n: 10
Summation of first 10 numbers is 55

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32) Write a function palin that returns 1 if passed argument is palin no. and returns 0 if it is not.

```
# include < stdio.h >
# include < conio.h >
int palin(int b)
{
    int z,c,t;
    t=b;
    c=0;
    while(t>0)
    {
        z=t%10;
        c=(c*10)+z;
        t=t/10;
    }
    if(b==c)
        return 1;
    else
        return 0;
}

int main()
{
    int n,x;
    clrscr();
    printf("\n Enter the value of n:");
    scanf("%d",&n);
    // palin(n);
    x=palin(n);
    if(x==1)
    {
        printf("\n Entered number is palindrom number." );
    }
    else
    {
        printf("\n Entered number is not palindrom number." );
    }
}
```

```
getch();  
    return(0);  
}
```

Output:

Enter the value of n:10



33) Write a function that will scan a character string passed as an argument and convert all lowercase character into their upper-case equivalent.

```
# include < stdio.h >
# include < conio.h >
void up()
{
    int l,i;
    char ans[30];
    printf("\n Enter any string:");
    fflush(stdin);
    gets(ans);
    l=strlen(ans);
    for(i=0;i<=l;i++)
    {
        if(ans[i]>=97 && ans[i]<=122)
        {
            ans[i]=ans[i]-32;
        }
        else
        {
            ans[i]=ans[i];
        }
    }
    printf("\n Upper case string is: ");
    puts(ans);
}
int main ()
{
    clrscr();
    up();
    getch();
    return(0);
}
```

Output:

Enter any string: abc abc abc
Upper case string is: ABC ABC ABC

34) Program to find reverse of a string without reverse function.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>

void rev(char str1[20])
{
    int c=0,i;
    c=strlen(str1);
    for(i=c;i>=0;i--)
    {
        printf("%c",str1[i]);
    }
}
int main()
{
    char str[20];
    int i;
    clrscr();
    printf("\n Enter any string: ");
    fflush(stdin);
    gets(str);
    rev(str);
    getch();
    return 0;
}
```

Output:

Enter any string: abcdef
reverse: : fedcba

35) Program to find an string from inputted array of string

```
# include < stdio.h >
# include < conio.h >
#include<math.h>
void search(char str[10][10]);
void main ()
{
    char str[10][10];
    int i;
    clrscr();
    for(i=0;i<3;i++)
    {
        printf("\n Enter The String %d :",i+1);
        fflush(stdin);
        scanf("%s",str[i]);
    }
    search(str);
    getch();
}
void search(char str[10][10])
{
    char ser[10];
    int i,c=0;
    printf("\n Enter the string which u want to search from inputted string: ");
    fflush(stdin);
    scanf("%s",ser);
    for(i=0;i<3;i++)
    {
        if(strcmp(ser,str[i])==0)
            c=1;
    }
    if(c==1)
        printf("\n String Found. ");
    else
        printf("\n String Not Found. ");
}
```

Output:

Enter The String 1 :ram

Enter The String 2 :jam

Enter The String 3 :amm

Enter the string which u want to search from inputed string: jam String Found.



36) Define a structure called 'cricket' that will describe the following information: Player name, Team name Batting average .

Using cricket, declare an array (user-defined) player with 50 elements and write a program to read the information about all the 50 players and print a all the 50 players & print a a team-wise list containing names of player with their batting average.

```
# include < stdio.h >
# include < conio.h >
#include<math.h>
struct cricket
{
    char pnm[20],tnm[20];
    float bavg;
} c[50];
int main()
{
    int n,i,j,flag=0,t=0;
    char nm[20][100];
    clrscr();
    printf("How many player's information u want 2 enter : ");
    scanf("%d",&n);

    for(i=0;i<n;i++)
    {
        printf("\nPlayer %d : ",i+1);
        printf("\nPlayer Name : ");
        scanf("%s",&c[i].pnm);
        printf("Team Name : ");
        scanf("%s",&c[i].tnm);
        printf("Batting average : ");
        scanf("%f",&c[i].bavg);
    }
    for(i=0;i<n;i++)
    {
        flag=0;
        for(j=0;j<n;j++)
        {
            if(strcmp(c[i].tnm,nm[j])==0)
```

```
        flag=1;
    }
    if(flag==0)
    {
        strcpy(nm[i],c[i].tnm);
        t++;
    }
}
for(i=0;i<n;i++)
{
    printf("\n\nTeam : %s",nm[i]);
    printf("\n-----");
    printf("\nPlayer Name Bating Average");
    printf("\n-----");
    for(j=0;j<n;j++)
    {
        if(strcmp(nm[i],c[j].tnm)==0)
        {
            printf("\n%11s %.2f",c[j].pnm,c[j].bavg);
        }
    }
    printf("\n-----");
}
getch();
return 0;
}

void linkfloat()
{
    float a=0.0,*x;
    x=&a;
    a=*x;
}
```

Output:

How many player's information u want 2 enter : 1

Player 1 :

Player Name : viru

Team Name : dd

Batting average : 99.999

Team : dd

Player Name Bating Average

 viru 100.00

37) In a program declare following structure member: name,code,age, weight,height.Read all members of the structure for 100 persons and find list of persons with all related data whose weight > 50 and height > 5 and print same with suitable format & title.

```
# include < stdio.h >
# include < conio.h >
struct stud
{
    char name[20],code[20];
    int age;
    float weight,height;
}s[100];
int main()
{
    int i,n;
    clrscr();
    printf("How many student's information u want 2 enter : ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("\nstudent %d : ",i+1);
        printf("\nEnter Name : ");
        scanf("%s",&s[i].name);
        printf("Enter code : ");
        scanf("%s",&s[i].code);
        printf("Enter age : ");
        scanf("%d",&s[i].age);
        printf("Enter weight : ");
        scanf("%f",&s[i].weight);
        printf("Enter height : ");
        scanf("%f",&s[i].height);
    }

    printf("\nStudent info. whose weight>50 and height>5 : ");
    printf("\n----\t\t----\t\t---\t\t-----\t\t-----");
    printf("\nName\t\tCode\t\tage\t\tweight\t\ttheight");
    printf("\n----\t\t----\t\t---\t\t-----\t\t-----");
    for(i=0;i<n;i++)
    {
```



```

        if(s[i].weight>50 && s[i].height>5)
        {

            printf("\n%s\t\t%s\t\t%d\t\t%.2f\t\t%.2f",s[i].name,s[i].code,s[i].age,s[i].wei
            ght,s[i].height);

        }
    }
    getch();
    return 0;
}
void linkfloat()
{
    float a=0.0,*x;
    x=&a;
    a=*x;
}

```

Output:

How many student's information u want 2 enter : 1
student 1 :
Enter Name : ram
Enter code : 60001
Enter age : 21
Enter weight : 65
Enter height : 6'1"

Student info. whose weight>50 and height>5 :

----	----	---	-----	-----
Name	Code	age	weight	height
----	----	---	-----	-----
ram	60001	21	65.00	6.00

38) Program to read an array of integers and prints its element in reverse order with the help of pointers.

```
# include < stdio.h >
# include < conio.h >
int main()
{
    int a[10],*p,i;
    p=a;
    clrscr();
    for(i=0;i<=9;i++)
    {
        printf("\n Enter Value %d :",i+1);
        scanf("%d",&*p);
        p++;
    }
    p--;
    printf("Reverse inputed numbers using pointers are: ");
    for(i=0;i<=9;i++)
    {
        printf(" \n %d",*p);
        p--;
    }
    getch();
    return 0;
}
```

Output:

```
Enter Value 1 :10
Enter Value 2 :20
Enter Value 3 :30
Enter Value 4 :40
Enter Value 5 :50
Enter Value 6 :60
Enter Value 7 :70
Enter Value 8 :80
Enter Value 9 :90
Enter Value 10 :100
```

Reverse inputed numbers using pointers are:

```
100 90 80 70 60 50 40 30 20 10
```



Hiren Vyas