Pr-1- write a c program to display "hello computer" on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
printf( "hello computer" );
}
```

Out put:

hello computer

Pr-2- write a c program to print roll no, name, address.

```
#include<stdio.h>
#include<conio.h>
void main()
{
printf( "ROLL NO=1" );
printf( "NAME=GROWMORE" );
printf( "ADDRESS= GROWMORE BCA COLLEGE \n GROWMORE CAMPUS \n HIMMATNAGAR" );
}
```

Output:

ROLL NO=1
NAME=GROWMORE
ADDRESS= GROWMORE BCA COLLEGE
GROWMORE CAMPUS
HIMMATNAGAR

Pr-3- write a C program to find the area of circle using the formula Area=PI*r*r.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
  float pi=3.14;
  float r,area;
  printf("ENTER THE VALUE OF r=");
  scanf("%f",&r);
  area=pi*r*r;
  printf("AREA=%f",area);
  getch();
 }
```

Output:

ENTER THE VALUE OF r=5

AREA=78.500000

Pr-4- write a C program to find the area of rectangle ,cube and tringle.(formula are: rectangle=l*b*h, tringle=(l*b)*0.5, cube=l*l*l)

```
#include<stdio.h>
#include<conio.h>
void main()
 {
  float t;
  int l,b,h,r,c;
  clrscr();
  printf("\nENTER THE VALUE OF l=");
  scanf("%d",&l);
  printf("\nENTER THE VALUE OF b=");
  scanf("%d",&b);
  printf("\nENTER THE VALUE OF h=");
  scanf("%d",&h);
  r=l*b*h;
  c=l*l*l;
  t=(l*b)*0.5;
```

```
  printf("\n RECTANGLE=%d",r);
  printf("\n CUBE=%d",c);
  printf("\n TRIANGLE=%f",t); getch();
}
```

Output:

```
ENTER THE VALUE OF l=5
ENTER THE VALUE OF b=3
ENTER THE VALUE OF h=2
 RECTANGLE=30
 CUBE=125
 TRIANGLE=7.500000
```

Pr-5- write a C program to find area and volume of sphere. formulas are area=4*pi*r*r, volume=4/3*pi*r*r*r.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
  float pi=3.14;
  float area,vol;
  int r;
  clrscr();
  printf("\nENTER THE VALUE OF r=");
  scanf("%d",&r);
  area=4*pi*r*r;
  vol=4/3*pi*r*r*r;
  printf("\nAREA=%f",area);
  printf("\nVOLUME=%f",vol);
 getch();
}
```

Output:

```
ENTER THE VALUE OF r=5
AREA=314.000000
VOLUNE=392.500000
```

Pr-6-write a c program to evaluate simple interest I=P*R*N/100.

```
#include<stdio.h>
#include<conio.h>
void main()
{
float p, r,n,i;
clrscr();
printf( "enter p=" );
scanf( "%f" ,&p);
 printf( "enter r=" );
scanf( "%f" ,&r);
printf( "enter n=" );
scanf( "%f" ,&n);
i=(p*r*n)/100;
printf( "intrest=%f" ,i);
getch();
}
```

Output:

```
enter p=100
enter r=6
enter n=3
intrest=18.000000
```

Pr-7-enter kilometer and convert it into meter,feet,inches,centimeter.

```
#include<stdio.h>
#include<conio.h>
void main()
{
long int km,f,m,cm;
float i;
clrscr();
printf("enter kilometer");
scanf("%ld",&km);
m=km*1000;
f=km*32748;
i=km*3448.38;
cm=km*100000;
printf("\n meter=%ld",m);
printf("\n feet=%ld",f);
printf("\n inch=%f",i);
printf("\n centimeter=%ld",cm);
}
```

Output:

```
enter kilometer2
 meter=2000
 feet=65496
 inch=6896.759766
 centimeter=200000
```

Pr-8-interchange two value.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n1,n2,t;
clrscr();
printf("\n enter n1:");
scanf("%d",&n1);
printf("\n enter n2:");
scanf("%d",&n2);
t=n1;
n1=n2;
n2=t;
printf("new n1=%d \n",n1);
printf("new n2=%d \n",n2);
}
```

Output:

```
 enter n1:22
 enter n2:33
new n1=33
new n2=22
```

pr-9-to convert feranheit in to centigrade, formula c=(f-32)/1.8.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int f;
float c;
clrscr();
printf("enter the value of f:");
scanf("%d",&f);
c=(f-32)/1.8;
```

pr-10- summation,subtraction, multiplication, division using arithmetic operator.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n1,n2,a,s,m;
float d;
clrscr();
printf("\n enter n1:");
scanf("%d",&n1);
printf("\n enter n2:");
scanf("%d",&n2);
```

```
printf("\n centigrade=%f",c);
}
```

Output:

enter the value of f:55

centigrade=12.777778

```
a=n1+n2;
s=n1-n2;
m=n1*n2;
d=n1/(float)n2;
printf("\n addition=%d",a);
printf("\n subtraction=%d",s);
printf("\n multiplication=%d",m);
printf("\n division=%f",d);
}
```

Output:

enter n1:20

enter n2:5

addition=25

subtraction=15

multiplication=100

division=4.000000

pr-11-enter days and convert it into years,month, and reminder days.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int d,y,m,rd;
clrscr();
printf("enter days:");
scanf("%d",&d);
y=d/365;
m=(d-(365*y))/30;
rd=(d-(365*y)-(m*30));
printf("year=%d \n",y);
printf("month=%d \n",m);
printf("reminder day=%d \n",rd);
}
```

Output:

enter days:400

year=1

month=1

reminder day=5

pr-12-to find largest value from three numbers using conditional operator.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n1,n2,n3;
clrscr();
printf("\n enter n1:");
scanf("%d",&n1);
printf("\n enter n2:");
scanf("%d",&n2);
printf("\n enter n3:");
scanf("%d",&n3);
(n1>n2)?((n1>n3)?printf("%d is
max",n1):printf("%d is
max",n3)):((n2>n3)?printf("%d is
max",n2):printf("%d is max",n3));
}
```

Output:

enter n1:22

enter n2:66

enter n3:55
66 is max

pr-13-to find largest value from three numbers.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n1,n2,n3;
clrscr();
printf("\n enter n1:");
scanf("%d",&n1);
printf("\n enter n2:");
scanf("%d",&n2);
printf("\n enter n3:");
scanf("%d",&n3);
if(n1>n2)
{
if(n1>n3)
{
printf("max=%d",n1);
}
else
{
printf("max=%d",n3);
}
}
else
{
if(n2>n3)
{
printf("max=%d",n2);
}
else
```

pr-14 given number is positive or negative or zero.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("\n enter n:");
scanf("%d",&n);
if(n>0)
{
printf("no is positive");
}
else if(n<0)
{
printf("no is negative");
}
else
{
printf("no is zero");
}
}
```

Output:

(1) enter n:8
no is positive
(2)enter n:-8
no is negative
(3)enter n:0
no is zero

```
{
printf("max=%d",n3);
}
}
}
```

Output:

```
 enter n1:88
 enter n2:99
 enter n3:77
max=99
```

pr-15entered character is capital or small or digit .

```
#include<stdio.h>
#include<conio.h>
void main()
{
char c;
clrscr();
printf("enter one character=");
c=getchar();
if(c>='A' && c<='Z')
{
printf("given character is an uppercase");
}
else if(c>='a' && c<='z')
{
printf("given character is an small case");
}
else if(c>='0' && c<='9')
{
printf("given character is digit");
}
else
{
printf("given character is special character");
}
}
```

pr-16 print 1 to 7 and relatively Sunday to Saturday.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("\n enter n:");
scanf("%d",&n);
switch(n)
{
case 1:printf("sunday");
        break;
case 2:printf("monday");
        break;
case 3:printf("tuesday");
        break;
case 4:printf("thrusday");
        break;
case 5:printf("friday");
        break;
case 6:printf("saturday");
        break;
case 7:printf("sunday");
        break;
default:printf("invalid day of number");
```

Output:

(1)enter one character=a
given character is an small case
(2) enter one character=A
given character is an uppercase
(3) enter one character=9
given character is digit
(4)enter one character=#
given character is special character

PR-17 //this is program for finding max and min from given 10 numbers.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,i,max,min;
  clrscr();
  for(i=1;i<=10;i++)
   {
        printf("enter no %d=",i);
        scanf("%d",&n);
        if(i==1)
         {
          max=n;
          min=n;
         }
         else
         {
        if(max<n)
         {
           max=n;
         }
        if(min>n)
         {
          min=n;
         }
   }
```

```
}
}
```

Output:

(1) enter n:1
sunday
(2) enter n:6
saturday
(3)enter n:55
invalid day of number

18//this is program for sum of digit.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 int n,x,s=0;
 clrscr();
 printf("enter no=");
 scanf("%d",&n);
 while(n!=0)
  {
        x=n%10;
        s=s+x;
        n=n/10;
  }
 printf("sum of digit=%d\n",s);
}
```

out put:

enter no=1234
sum of digit=10

```
        }
        }
    }
    printf("max=%d\n",max);
    printf("min=%d\n",min);
    }
```

out put:

```
enter no 1=12
enter no 2=23
enter no 3=222
enter no 4=34
enter no 5=45
enter no 6=56
enter no 7=67
enter no 8=66
enter no 9=77
enter no 10=78
max=222
min=12
```

19//this is program for finding sum of first 100 odd and even no.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int i,o=0,e=0;
  clrscr();
  for(i=1;i<=200;i++)
   {
        if(i%2==0)
         {
              e=e+i;
         }
         else
```

20//this is program for display 25 fibonnaci no.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  long int a=0,b=1,c,i;
  clrscr();
  printf("fibonnaci series ::\n");
  printf("%ld\n",a);
  printf("%ld\n",b);
  for(i=3;i<=25;i++)
   {
    c=a+b;
    printf("%ld\n",c);
    a=b;
    b=c;
```

```
        {
         o=o+i;
        }
      }
  printf("sum of odd no=%d\n",o);
  printf("sum of even no=%d\n",e);
}
```

out put:

sum of odd no=10000

sum of even no=10100

```
  }
```

out put:

fibonnaci series ::

0

1

1235813213455891442333776109871597258441816765109461771128657463 68

21 //This is program for accepted no prime or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int no,i;
clrscr();
printf("Enter number:");
scanf("%d",&no);
for(i=2;i<=no;i++)
{
if(no%i==0)
break;
}
if(i==no)
printf("this number is prime \n");
else
printf("this number is not prime \n");
}
```

Out put:

Enter number:23

22 //this is programme for to display first 100 prime nos.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int i,j,no=0;
clrscr();
for(i=0;no!=100;i++)
{
for(j=2;j<=no;j++)
{
if(i%j==0)
break;
}
if(i==j)
{
printf("%d\n",i);
}
no++;
}
getch();
```

this number is prime
Enter number:22
this number is not prime

```
}
```

Out put:

2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97

23//this is program for finding factorial of no.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,i,f=1;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(i=n;i>=1;i--)
   {
          f=f*i;
        }
        printf("Factorial of    %d is %d\n",n,f);
}
```

Out put:

Enter No=5
Factorial of 5 is 120

24//this is program for accepted no and its reverse no.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,x,s=0;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  while(n!=0)
   {
        x=n%10;
        s=s*10+x;
        n=n/10;
   }
  printf("Reverse No=%d\n",s);
}
```

Out put:

Enter No=123
Reverse No=321

25//this is program for accepted no is pelindrom or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
```

26//this is program for converting decimal to binary.

```
#include<stdio.h>
#include<conio.h>
void  main()
{
```

```
int m,n,x,s=0;
clrscr();
printf("Enter No=");
scanf("%d",&n);
m=n;
while(n!=0)
 {
        x=n%10;
        s=s*10+x;
        n=n/10;
 }
 if(m==s)
        {
         printf("%d is Pelindrom no\n",m);
        }
        else
        {
         printf("%d is not Pelindrom no\n",m);
        }
}
```

Out put:

(1)Enter No=1234

1234 is not Pelindrom no

(2)Enter No=12321

12321 is Pelindrom no

```
int n,s=1,x,b=0;
clrscr();
printf("Enter Decimal No=");
scanf("%d",&n);
while(n!=0)
 {
        x=n%2;
        s=s*10+x;
        n=n/2;
 }
 while(s!=0)
 {
        x=s%10;
        b=b*10+x;
        s=s/10;
 }
 b=b/10;
 printf("Binary No=%d\n",b);
}
```

Out put:

Enter Decimal No=10

Binary No=1010

27//this is program for converting decimal to octal.

```
#include<stdio.h>
#include<conio.h>
void main()
{
```

28//this is program for converting decimal to hexadecimal.

```
#include<stdio.h>
#include<conio.h>
void main()
{
```

```
int n,s=1,x,b=0;
clrscr();
printf("Enter Decimal No=");
scanf("%d",&n);
while(n!=0)
 {
        x=n%8;
        s=s*10+x;
        n=n/8;
 }
 while(s!=0)
  {
        x=s%10;
        b=b*10+x;
        s=s/10;
  }
  b=b/10;
 printf("Octal No=%d\n",b);
}
```

Out put:

Enter Decimal No=10

Octal No=12

```
int b[20],i,n,j;
clrscr();
printf("\n Enter Decimal number:");
scanf("%d",&n);
i=0;
while(n>0)
{
        b[i]=n%16;
        n=n/16;
        i++;
}
printf("\n Hexadecimal number :");
for(j=i-1;j>=0;j--)
{
switch(b[j])
{
        case 10:
        printf("A");
        break;
        case 11:
        printf("B");
        break;
        case 12:
        printf("C");
        break;
        case 13:
        printf("D");
        break;
        case 14:
        printf("E");
        break;
        case 15:
        printf("F");
        break;
        default:
```

```
        printf("%d",b[j]);
    }
    }
    }
```

Out put:

Enter Decimal number:2598

Hexadecimal number :A26

29//this is program for display first 5 armstrong number.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 int t,a=1,n=1,x,y,s;
 clrscr();
  printf("Armstrong No\n");
  while(n<=5)
   {
        t=a;
        s=0;
        while(t!=0)
          {
              x=t%10;
              y=t/10;
              s=s+(x*x*x);
              t=y;
          }
          if(a==s)
              {
               printf("%d\n",a);
               n++;
               }
```

30//this is for arrange the accepted number in accending and decending order.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int temp,i,j,no[10],n;
clrscr();
printf("\n Enter number:");
scanf("%d",&n);
for (i=0;i<n;i++)
{
printf("\n Enter number:");
scanf("%d",&no[i]);
}
//descending order
for(i=0;i<n;i++)
{
for(j=i+1;j<n;j++)
{
if(no[i]<no[j])
{
temp=no[i];
no[i]=no[j];
no[j]=temp;
```

```
            a++;
        }
}
```

Output:

Armstrong No
1
153
370
371
407

```
    }
    }
    }
    printf("\n Descending no:");
    for(i=0;i<n;i++)
    {
    printf("%d \n",no[i]);
    }
    //Ascending order
    for(i=0;i<n;i++)
    {
    for(j=i+1;j<n;j++)
    {
    if(no[i]>no[j])
    {
    temp=no[i];
    no[i]=no[j];
    no[j]=temp;
    }
    }
    }
    printf("\n Ascending no:");
    for(i=0;i<n;i++)
    {
    printf("%d\n",no[i]);
    }
    }
```

Out put:

Enter number:5
Enter number:23
Enter number:34
Enter number:3
Enter number:2
Enter number:55
Descending no:55

34
23
3
2
Ascending no:2
3
23
34
55

31//This is program for accepted string is pelindrom or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
char str[100],len,i;
clrscr();
printf("\n Enter any string:");
gets(str);
len=strlen(str)-1;
for(i=0;str[i]!='\0';i++,len--)
{
if(str[i]!=str[len])
break;
}
if(i==strlen(str))
printf("Entered string is pelindrom");
else
printf("Entered string is not pelindrom");
}
```

Out put:1

Enter any string:madam

32//this program for convert given line into uppercase or lowercase.

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
        int i;
        char str[60],ch;
        clrscr();
        printf("Enter string:");
        gets(str);
        printf("\n====Menu====");
        printf("\nPress U for upper case");
        printf("\nPress L for lower case");
        printf("\n Enter your choice-->");
        ch=getchar();
        printf("\n\n\n==>");
        switch(ch)
                {
                        case 'U':
                        case 'u':
                                for(i=0;str[i]!=NULL;i
++)
                                        {
```

Entered string is pelindrom

Out put:2

Enter any string:abscfe

Entered string is not pelindrom

```
                                        putchar(toupp
er(str[i]));
                                    }
                                    break;
                            case 'L':
                            case 'l':
                                    for(i=0;str[i]!=NULL;i
++)
                                    {
                                        putchar(tolow
er(str[i]));
                                    }
                                    break;
                            default:
                                    printf("\n your choice
is wrong");
                                    break;
                        }
                getch();
                }
```

Out put:1

Enter string:madam

====Menu====

Press U for upper case

Press L for lower case

Enter your choice-->u

==>MADAM

Out put:2

Enter string:MADAM

====Menu====

Press U for upper case

Press L for lower case

Enter your choice-->l
==>madam

33//This program for count no of words,character,line and spaces from given text.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int i,word,chr,line,space;
char str[100],ch='A';
clrscr();
word=chr=line=space=0;
word=line=1;
printf("Enter String:(Exit Press@:)");
for(i=0;ch!='@';i++)
{
ch=getchar();
str[i]=ch;
}
str[i]='\0';
for(i=0;str[i]!='@';i++)
{
if(str[i]== ' ')
space++;
if(str[i]=='\n')
line++;
if(str[i]== ' ' &&(    str[i-1]!=' ' && str[i-1]!='\n'))
word++;
if(str[i]!=' ' && str[i-1]!='\n' && str[i]=='\n')
word++;
chr++;
}
```

34 //this program for to sort given string in asceding order.

```
#include<stdio.h>
#include<conio.h>
void main()
{
char str[30],ch;
int i,j;
clrscr();
printf("Enter String:");
gets(str);
for(i=0;str[i]!='\0';i++)
{
for(j=0;str[j]!='\0';j++)
{
if(str[i]<str[j])
{
ch=str[i];
str[i]=str[j];
str[j]=ch;
}
}
}
printf("\n\nAfter sorting Stringis: %s",str);
}
```

Out put:

Enter String:anfsgetrhdy
After sorting Stringis: adefghnrsty

```
printf("\n space=%d",space);
printf("\n word=%d",word);
printf("\n line=%d",line);
printf("\n char=%d",chr);
}
```

Out put:

```
Enter String:(Exit Press@:)samarth bca
collage
himmatnagar
@
 space=2
 word=5
 line=3
 char=32
```

35//This program is to prepare pay slip using following data.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int da,hra,ma=300,pf,gross,net;
int basic;
clrscr();
printf("Enter Basic Salary:");
scanf("%d",&basic);
da=basic/10;
hra=(basic*(750/100))/100;
pf=(basic*(1250/100))/100;
gross=basic+da+hra+ma;
net=gross-pf;
printf("Your Gross Salary is:%d \n",gross);
printf("Your Net Salary is %d\n",net);
}
```

36 //This program for to read marks and your program will display grade.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int marks;
clrscr();
printf("Enter Marks:");
scanf("%d",&marks);
if(marks>=80 && marks<=100)
{
printf("Distiction");
}
else if(marks>=60 && marks<=79)
{
printf("First Class");
}
else if(marks>=50 && marks<=59)
{
```

Output:

Enter Basic Salary:5000

Your Gross Salary is:5495

Your Net Salary is 5550

```
printf("Second Class");
}
else if(marks>=35 && marks<=49)
{
printf("Pass Class");
}
else if(marks<=34 && marks>=0)
{
printf("Fail");
}
}
```

Out put:

Enter Marks:23

Fail

Enter Marks:45

Pass Class

Enter Marks:77

First Class

37//This program is to display 1+1/2+1….n.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i;
float s=0;
clrscr();
printf("Enter No : ");
scanf("%d",&n);
for(i=1;i<=n;i++)
 {
  s=s+(1.0/i);
  }
  printf("Ans=%f",s);
}
```

38//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
   int n,r,c;
   clrscr();
   printf("Enter No=");
   scanf("%d",&n);
   for(r=1;r<=n;r++)
    {
        for(c=1;c<=n;c++)
        {
          if(c<=r)
              {
```

Output:

Enter No : 3

Ans=1.833333

```
                printf("%d",c);
              }
          }
          printf("\n");
    }
}
```

Out put:

Enter No=5

1

12

123

1234

12345

39//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,r,c;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=1;c<=n;c++)
        {
          if(c<=r)
                {
                  printf("%d",r);
                }
          }
```

40//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,r,j;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(j=r;j>=1;j--)
                {
                  printf("%d",j%2);
          }
          printf("\n");
    }
}
```

```
        printf("\n");
   }
 }
```

Out put:

Enter No=4

1

22

333

4444

Out put:

Enter No=5

1

01

101

0101

10101

41//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
  int n,r,c;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=n;c>=1;c--)
         {
          if(c<=r)
                {
                  printf("%d ",r);
                 }
           else
           {
                printf(" ");
                }
          }
```

42//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
  int n,r,c,t=1;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=1;c<=n;c++)
         {
          if(c<=r)
                {
                  printf("%d",t);
                  t++;
                 }
           }
          printf("\n");
   }
 }
```

```
        printf("\n");
    }
}
```

Out put:

Enter No=5

1

22

Not Valid

333

4444

55555

Out put:

Enter No=4

1

23

456

78910

43//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,r,c;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=1;c<=n;c++)
         {
          if(c<=r)
                {
                  printf("*");
                 }
         }
         printf("\n");
  }
```

44//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,r,c;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=n;c>=1;c--)
         {
          if(c<=r)
                {
                  printf("* ");


                 }
                else
                {
```

```
}
```

Out put:

```
Enter No=5
*
**
***
****
*****
```

```
                printf(" ");
                }
            }
            printf("\n");
    }
}
```

Out put:

```
Enter No=5
    *
   **
  ***
 ****
*****
```

45//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,r,c,t=1;
  clrscr();
  printf("Enter No=");
  scanf("%d",&n);
  for(r=1;r<=n;r++)
   {
        for(c=n;c>=1;c--)
        {
          if(c<=r)
                {
                  printf("%3d    ",t);
                  t++;
                 }
```

46//Write a program to display this output on the screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  char s[]="CPROGRAMMING";
  int i,j,l;
  clrscr();
  l=strlen(s);
  for(i=0;i<l;i++)
   {
         for(j=0;j<=i;j++)
          {
            printf("%c",s[j]);
          }
         printf("\n");
   }
  for(i=l-2;i>=0;i--)
```

```
                else
                {
                 printf("     ");
                 }
            }
           printf("\n");
    }
}
```

Out put:

Enter No=5

```
          1
        2      3
      4      5       6
```

Not Valid

```
    7       8      9     10
 11     12     13     14     15
```

```
    {
          for(j=0;j<=i;j++)
          {
            printf("%c",s[j]);
          }
          printf("\n");
    }
}
```

Out put:

```
C
CP
CPR
CPRO
CPROG
CPROGR
CPROGRA
CPROGRAM
CPROGRAMM
CPROGRAMMI
CPROGRAMMIN
CPROGRAMMING
CPROGRAMMIN
CPROGRAMMI
CPROGRAMM
CPROGRAM
CPROGRA
CPROGR
CPROG
CPRO
CPR
CP
C
```

47//This program is to find maximum and minimum value from the givan array.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a[5],max,min,i,j;
clrscr();
for(i=0;i<5;i++)
 {
  printf("Enter Element =");
  scanf("%d",&a[i]);
 }
 max=a[0];
 min=a[0];
 for(i=1;i<5;i++)
  {
   if(a[i]>max)
          {
           max=a[i];
          }
    if(a[i]<min)
          {
            min=a[i];
          }
   }
    printf("Max=%d\n",max);
    printf("Min=%d\n",min);
}
```

Output:

```
Enter Element =5
Enter Element =23
Enter Element =34
```

48//This program is to find the next minimum value from the given array.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a[5],max,min,i,j,nm;
clrscr();
for(i=0;i<5;i++)
 {
  printf("Enter Element =");
  scanf("%d",&a[i]);
 }
 max=a[0];
 min=a[0];
 for(i=1;i<5;i++)
 {
  if(a[i]>max)
          {
           max=a[i];
          }
   if(a[i]<min)
          {
            min=a[i];
          }
  }
    printf("Max=%d\n",max);
    printf("Min=%d\n",min);
    nm=max;
  for(i=0;i<5;i++)
   {
   if(a[i]>min && a[i]<nm)
          {
           nm=a[i];
```

```
Enter Element =1
Enter Element =55
Max=55
Min=1
```

```
        }
       }
   printf("Next Min=%d\n",nm);
  }
```

Output:

```
Enter Element =88
Enter Element =99
Enter Element =23
Enter Element =54
Enter Element =11
Max=99
Min=11
Next Min=23
```

49//This program is to input n and find out the sum, average, max, min, total even no and total odd no.(without use of array)

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int n,i,t,s=0,mx=0,mn=0,to=0,te=0;
  float a;
  clrscr();
  printf("How many nos. you have to entered=");
  scanf("%d",&n);
  for(i=1;i<=n;i++)
   {
        printf("Enter No=");
        scanf("%d",&t);
        s=s+t;
        if(t>mx)
```

50//This program is to input n and find out the sum, average, max, min, total even no and total odd no.(using array)

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int
n,i,t[20],s=0,mx=-32768,mn=32767,to=0,te=0;
  float a;
  clrscr();
  printf("How many nos. you have to entered=");
  scanf("%d",&n);
  for(i=0;i<n;i++)
   {
        printf("Enter No=");
        scanf("%d",&t[i]);
        s=s+t[i];
        if(t[i]>mx)
```

```
        {
         mx=t;
         }
        if(t<mn)
        {
         mn=t;
         }
        if(t%2==0)
        {
                te=te+t;
         }
        else
         {
         to=to+t;
         }
        }
        a=s/(float)n;
        printf("Sum=%d\n",s);
        printf("Avg=%f\n",a);
        printf("Max=%d\n",mx);
        printf("Min=%d\n",mn);
        printf("Sum of Odd No=%d\n",to);
        printf("Sum of Even No=%d\n",te);
}
```

Output:

How many nos. you have to entered=5
Enter No=12
Enter No=34
Enter No=43
Enter No=23
Enter No=55
Sum=167
Avg=33.400002
Max=55

```
        {
         mx=t[i];
         }
        if(t[i]<mn)
        {
         mn=t[i];
         }
        if(t[i]%2==0)
        {
                te=te+t[i];
         }
        else
         {
         to=to+t[i];
         }
        }
        a=s/(float)n;
        printf("Sum=%d\n",s);
        printf("Avg=%f\n",a);
        printf("Max=%d\n",mx);
        printf("Min=%d\n",mn);
        printf("Sum of Odd No=%d\n",to);
        printf("Sum of Even No=%d\n",te);
}
```

Output:

How many nos. you have to entered=5
Enter No=23
Enter No=34
Enter No=45
Enter No=12
Enter No=99
Sum=213
Avg=42.599998
Max=99

```
Min=0
Sum of Odd No=121
Sum of Even No=46
```

```
Min=12
Sum of Odd No=167
Sum of Even No=46
```

Pr-51 //This program is to display the two matrix on screen and perform the addition of two matrix and print on screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 int a[3][3],b[3][3],d[3][3],r,c;
 clrscr();
 for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
  {
   printf("Enter Value for Matrix A=");
   scanf("%d",&a[r][c]);
  }
  }
 for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
  {
   printf("Enter Value for Matrix B=");
   scanf("%d",&b[r][c]);
  }
  }
printf("\n\n\n<<MATRIX A>>\n");
 for(r=0;r<3;r++)
  {
```

52//This program is to display the two matrix on screen and perform the multiplication of two matrix and print on screen.

```
#include<stdio.h>
#include<conio.h>
void main()
 {
int a[3][3],b[3][3],d[3][3],r,c,k;
 clrscr();
 printf("MATRIX = A\n\n\n");
 for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
   {
        printf("Enter Value=");
        scanf("%d",&a[r][c]);
        }
   }
 printf("MATRIX B\n\n\n");
 for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
   {
        printf("Enter Value=");
        scanf("%d",&b[r][c]);
        }
  }
 printf("MATRIX MULTIPLICATION\n\n\n");
```

```
  for(c=0;c<3;c++)
  {
          printf("%3d",a[r][c]);
          }
         printf("\n");
  }
printf("\n\n\n<<MATRIX B>>\n");
for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
  {
          printf("%3d",b[r][c]);
          }
         printf("\n");
  }
printf("\n\n<<ADDISION OF TWO
MATRIX>>\n");
for(r=0;r<3;r++)
  {
  for(c=0;c<3;c++)
  {
          d[r][c]=a[r][c]+b[r][c];
          printf("%d ",d[r][c]);

          }
         printf("\n");
  }
}
```

Output:

Enter Value for Matrix A=1

Enter Value for Matrix A=2

Enter Value for Matrix A=3

Enter Value for Matrix A=4

Enter Value for Matrix A=5

```
for(r=0;r<3;r++)
{
for(c=0;c<3;c++)
{
     d[r][c]=0;
  for(k=0;k<3;k++)
      {
        d[r][c]=d[r][c]+(a[r][k]*b[k][c]);
      }
     }
}
printf("<<<MATRIX A\n\n");
for(r=0;r<3;r++)
{
for(c=0;c<3;c++)
{
     printf("%3d",a[r][c]);
     }
     printf("\n");
}
  printf("<<<MATRIX B\n\n");
for(r=0;r<3;r++)
{
for(c=0;c<3;c++)
  {
     printf("%3d",b[r][c]);
     }
     printf("\n");
 }
printf("<<<MATRIX C\n\n");
for(r=0;r<3;r++)
{
for(c=0;c<3;c++)
  {
     printf("%3d",d[r][c]);
```

```
Enter Value for Matrix A=6
Enter Value for Matrix A=7
Enter Value for Matrix A=8
Enter Value for Matrix A=9
Enter Value for Matrix B=1
Enter Value for Matrix B=2
Enter Value for Matrix B=3
Enter Value for Matrix B=4
Enter Value for Matrix B=5
Enter Value for Matrix B=6
Enter Value for Matrix B=7
Enter Value for Matrix B=8
Enter Value for Matrix B=9
<<MATRIX A>>
 1   2   3
 4   5   6
 7   8   9
<<MATRIX B>>
 1   2   3
 4   5   6
 7   8   9
<ADDISION OF TWO MATRIX>>
246
8 10 12
14 16 18
```

```
            }
            printf("\n");
        }
       getch();
    }
```

Output:

```
MATRIX = A
Enter Value=1
Enter Value=2
Enter Value=3
Enter Value=4
Enter Value=5
Enter Value=6
Enter Value=7
Enter Value=8
Enter Value=9
MATRIX B
Enter Value=9
Enter Value=8
Enter Value=7
Enter Value=6
Enter Value=5
Enter Value=4
Enter Value=3
Enter Value=2
Enter Value=1
MATRIX MULTIPLICATION


<<<MATRIX A
 1   2   3
 4   5   6
 7   8   9
<<<MATRIX B
 9   8   7
 6   5   4
```

	3 2 1 <<<MATRIX C 30 24 18 84 69 54 138 114 90