# (1)(3)Write a program to print your name and address on your screen. Write a program to get values from user using scanf () function.

```
#include<stdio.h>
#include<conio.h>
void main()
     clrscr();
     char name[30], surname[30], city[30];
     int age, x, y, z;
     printf("Enter your Name:-");
     scanf("%s", name);
     printf("Enter your Surname:-");
     scanf("%s", surname);
     printf("Enter Your age:-");
     scanf("%d" ,&age);
     printf("Enter Your city name:-");
     scanf("%s",city);
     printf("Enter num one");
     scanf("%d",&x);
     printf("Enter num two");
     scanf("%d",&y);
     z=x+y;
     printf("Your name is %s \n", name);
     printf("Your Surname is %s \n", surname);
     printf("Your age is %d \n",age);
     printf("Your city name is %s \n",city);
     printf("Your Addition is %d \n",z);
     getch();
}
```

# (2) Write a program to initialize value in integer, float and character and print on screen.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i=5;
    float f=3.25;
    char ch='a';
    clrscr();
    printf("%d\n",i);
    printf("%f\n",f);
```

```
printf("%c\n",ch);
     getch();
}
(4) Write a program to use arithmetic operator. (+, -, *, /, %)
#include<stdio.h>
#include<conio.h>
void main()
{
     int a=4, b=2;
     float f=4.56;
     char num[]="5.81";
     char name[]="Devin";
     char ch='D';
     clrscr();
     printf("\n %d",a);
     printf("\n %d",b);
     printf("\n %d",a+b);
     printf("\n %d",a*b);
     printf("\n %d",a/b);
     printf("\n %d",a-b);
     printf("\n %f",f);
     printf("\n %s", num);
     printf("\n %s", name);
     printf("\n %c",ch);
     getch();
}
(5) Write a program to use relational operator. (\langle, \rangle, \langle=, \rangle=, ==, !=)
#include<stdio.h>
#include<conio.h>
void main()
     int a,b;
     clrscr();
```

printf("Enter num A");

printf("Enter num B");

scanf("%d", &a);

scanf("%d", &b);

```
printf("\n %d",a==b);
    printf("\n %d",a<b);
    printf("\n %d",a<=b);
    printf("\n %d",a>=b);
    printf("\n %d",a>=b);
    printf("\n %d",a!=b);
    getch();
}

(6) Write a program to use Increment/Decrement operator. (Prefix: ++a, --a Postfix: a++,a--)
```

```
#include<conio.h>
#include<stdio.h>
void main()
{
    int i=5;
    clrscr();
    printf("%d",++i);
    getch();
}
```

(8) Write a program to input two numbers and print its square and cube.

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

    int a,b,c,d;
    clrscr();
    printf("Enter Your A num:-");
    scanf("%d",&a);
    printf("Enter Your B num:-");
    scanf("%d",&b);

    c=a*a;
    printf("Your num square is %d",c);
    d=b*b*b;
    printf("\n Your num cube is %d",d);

    getch();
}
```

#### (9) Write a program to find simple interest. ((P\*R\*N)/100)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    float a,b,c,d;

    printf("Enter principle value:-");
    scanf("%f",&a);
    printf("Enter rate value:-");
    scanf("%f",&b);
    printf("Enter time duration:-");
    scanf("%f",&c);

    d=a*b*c/100;
    printf("Your simple interest is %f",d);

    getch();
}
```

## (10) Write a program to calculate the area of circle. (3.14\*r\*r)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    float a=3.14;
    float b,c;

    printf("Enter radius of circle:-");
    scanf("%f",&b);

    c=a*b*b;
    printf("Your circle area is d%f",c);

    getch();
}
```

## (11) Write a program to calculate the area of triangle. ((b\*h)/2)

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

```
{
     int a,b,c;
     clrscr();
     printf("Enter base value:-");
     scanf("%d", &a);
     printf("Enter height value:-");
     scanf("%d", &b);
     c=a*b/2;
     printf("Area of triangle is %d",c);
     getch();
}
(12) Write a program to calculate the formula. (c+d)*(g+h).
#include<stdio.h>
#include<conio.h>
void main()
     int a,b,c,d,e,f,g;
     clrscr();
     printf("Enter num A");
     scanf("%d", &a);
     printf("Enter num B");
     scanf("%d", &b);
     printf("Ente num C");
     scanf("%d",&d);
     printf("Enter num D");
     scanf("%d", &e);
     c=a+b;
     f=d+e;
     g=c*f;
     printf("Your ans is %d",g);
     getch();
}
(14) Write a program to swap 2 numbers using 3rd variable.
#include<stdio.h>
#include<conio.h>
void main()
     int a,b,c;
     clrscr();
     printf("Enter num 1:");
```

```
scanf("%d",&a);
printf("Enter num 2:");
scanf("%d",&b);
c=a;
a=b;
b=c;
printf("After swap first to seconf :%d \n",a);
printf("After swap second to first :%d \n",b);
getch();
}
```

(16) Write a program to input age and check age is greater than (Using only if) (17 same as 16)

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

    int age;
    clrscr();
    printf("Enter your age");
    scanf("%d",&age);
    if(age>=18)
    {
        printf("You are adult");
        }
        else
        {
            printf("Your are Minor");
        }
        getch();
}
```

- (18) Write a program to input 2 numbers and print the maximum among them. (Using if else).
- (19) Write a program to input 2 numbers and print the minimum among them. (Using if else).
- (25) (26) Same as (18&19)

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

```
int a,b;
clrscr();
printf("Enter num A");
scanf("%d",&a);
printf("Enter num B");
scanf("%d",&b);
if(a>=b)
{
        printf("Here is maximum num %d",a);
}
else(b>=a)
{
        printf("Here is maximum num %d",b);
}
getch();
```

(20) Write a program to input number from user and print it is odd or even. (Using if else).

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a;
    clrscr();
    printf("Enter num A");
    scanf("%d", &a);

    if(a%2==0)
    {
        printf("Here is a even num");
    }
    else
    {
        printf("Here is a odd num");
    }

    getch();
}
```

(21) Write a program which takes full year and prints whether it is leap year or not. (Using if else)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a;
    clrscr();
    printf("Enter year A");
    scanf("%d", &a);

    if(a%4==0)
    {
        printf("Here is a leap year");
    }
    else
    {
        printf("Here is a normal year");
    }
    getch();
}
```

(22) Write a program to input a character and print that is vowel or consonant. (Using if else)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    char i;
    clrscr();
    printf("Enter a char:");
    scanf("%c",&i);
    if(i=='a')
    {
        printf("Here is a vowel");
    }
    else if(i=='e')
    {
        printf("Here is a vowel");
    }
    else if(i=='i')
    {
        printf("Here is a vowel");
    }
    else if(i=='i')
}
```

```
{
    printf("Here is a vowel");
}
else if(i=='u')
{
    printf("Here is a vowel");
}
else
{
    printf("Here is a consonant");
}
getch();
}
```

(23) Write a program to get a character in lower case and print in upper case or get character in upper case and print in lower case.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    char i,a;
    clrscr();
    printf("Enter alphabate:",i);
    scanf("%c",&i);

    a=i+32;
    printf("Your lower case alphabate:%c",a);
    getch();
}
```

(24) Write a program to enter number and check it is positive, negative or zero. (Using else if)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int x;
    clrscr();
```

```
printf("Enter num A:-");
scanf("%d",&x);
if(x==0)
{
     printf("Here is a zero");
}
else if(x>=0)
{
     printf("Here is a positive num");
}
else
{
     printf("Here is a negative num");
}
getch();
}
```

(27) Write a program to make mark sheet of student.

Get roll\_no, name, subl\_mark, sub2\_mark, sub3\_mark from user.

Print all detail with total of subject marks, percentage and result.

```
#include<stdio.h>
#include<conio.h>
void main()
     char name[30];
     int a,b,c,d,e;
     float f;
     clrscr();
     printf("\n Enter Your Name:-");
     scanf("%s", name);
     printf("\n Enter Your Maths mark:-");
     scanf("%d",&a);
     printf("\n Enter your Physics Marks:-");
     scanf("%d", &b);
     printf("\n Enter your Chemistry Marks:-");
     scanf("%d",&c);
     printf("\n Enter your Computer Marks:-");
     scanf("%d",&d);
     printf("\n Your Maths marks is %d",a);
     printf("\n Your Physics marks is %d",b);
     printf("\n Your Chemistry marks is %d",c);
```

```
printf("\n Your Computer marks is %d",d);
     e=a+b+c+d;
     printf("\n Your marks total is %d",e);
     f=e/4;
     printf("\n Your percentage is %f",f);
     if(f >= 90)
           printf("Grade-A");
     else if(f \ge 80)
           printf("Grade-B");
     else if(f > = 70)
           printf("Grade-C");
     else if (f > = 60)
           printf("Grade-D");
     else
           printf("Fail");
     getch();
}
```

(28) Write a program to make a G.K. test using switch case. Who developed 'C'?

A. Ken Thompson B. Dennis Ritchie

C. Martin Ritchard

D. Peter Norton

```
#include<stdio.h>
#include<conio.h>
void main()
{
     int option;
     clrscr();
     printf("\n Who developed C?");
     printf("\n (a)Ken Thompson \t (b)Dennis Ritchie");
```

```
printf("\n (c)Martin Ritchard \t (d)Peter Norton");
     printf("\n Enter option:-");
     scanf("%d", &option);
     switch (option)
     {
           case 1:
           printf("Ken Thompson", option);
           break;
           case 2:
           printf("Dennis Ritchie", option);
           case 3:
           printf("Martin Ritchard", option);
           break;
           case 4:
           printf("Peter Norton", option);
           break;
           default:
           printf("No Result Found");
     getch();
}
```

(29) Write a program to print month in word using switch case.

- 1. January
- 2. February

12. December

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int month;
    clrscr();

    printf("Enter a month:-");
    scanf("%d", &month);
    switch(month)
    {
        case 1:
        printf("January", month);
        break;
        case 2:
        printf("February", month);
        break;
```

```
case 3:
           printf("March", month);
           break;
           case 4:
           printf("April", month);
           case 5:
           printf("May", month);
           break;
           case 6:
           printf("June", month);
           break;
           case 7:
           printf("July", month);
           break;
           case 8:
           printf("August", month);
           break;
           case 9:
           printf("September", month);
           break;
           case 10:
           printf("October", month);
           break;
           case 11:
           printf("November", month);
           break;
           case 12:
           printf("December", month);
           break;
           default:
           printf("Result not found", month);
     }
     getch();
}
```

(30) Write a program to get 2 numbers and print its addition, subtraction, multiplication and division using switch case.

- 3. addition
- 4. subtraction
- 5. multiplication
- 6. division

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

```
int a,b,c,d,e,f;
     clrscr();
     printf("Enter your num A:-");
     scanf("%d",&a);
     printf("Enter your num B:-");
     scanf("%d", &b);
     printf("Enter your operator");
     scanf("%d",&c||&d||&e||&f);
     c=a+b;
     d=a-b;
     e=a*b;
     f=a/b;
     switch(c,d,e,f)
           case 1:
           printf("a+b %d",c);
           break;
           case 2:
           printf("a-b %d",d);
           break;
           case 3:
           printf("a*b %d",e);
           break;
           case 4:
           printf("a/b %d",f);
           break;
           default:
           printf("Result not found");
     }
     getch();
}
```

(31) Write a program to make a program of Banking using switch case.

- 7. balance check
- 8. withdraw
- 9. deposit
- 10. exit

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int select;
    clrscr();
    printf("Enter your Transection");
    scanf("%d",&select);
```

```
switch(select)
           case 1:
           printf("balance check", select);
           break;
           case 2:
           printf("withdraw", select);
           break;
           case 3:
           printf("deposite", select);
           break;
           case 4:
           printf("exit", select);
           break;
           default:
           printf("Result not found");
     }
     getch();
}
```

(32) Write a program to get a character and print it is vowel or consonant. (Using switch case)

```
#include<stdio.h>
#include<conio.h>
void main()
     char i;
     clrscr();
     printf("Enter alphabate:",i);
     scanf("%c",&i);
     switch(i)
           case 'a':
           printf("Here is a vowel %c",i);
           break;
           case 'e':
           printf("Here is a vowel %c",i);
           break;
           case 'o':
           printf("Here is a vowel %c",i);
           break;
           case 'i':
           printf("Here is a vowel %c",i);
           break;
           case 'u':
           printf("Here is a vowel %c",i);
           break;
           default:
```

```
printf("Here is a consonant %c",i);
}
getch();
}
```

(34) Write a program to print 1 to 10. (using for, while and do while)

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

    for(i=1; i<=10;i++)
    {
        printf("\n %d",i);
    }
    getch();
}</pre>
```

(35) Write a program to print 10 to 1. (using for, while and do while)

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i;
    clrscr();
    for(i=10; i>=0;i--)
    {
        printf("\n %d",i);
    }
    getch();
}
```

(36) Write a program to print 2, 4, 6, 8, \_\_\_n.

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

```
void main()
     int i,n;
     clrscr();
     printf("Enter your num N:");
     scanf("%d",&n);
     for(i=2;i<=n;i++)
           printf("\n %d",i++);
     getch();
}
(37)Write a program to print 3, 5, 7, 9, ___n.
#include<stdio.h>
#include<conio.h>
void main()
     int i,n;
     clrscr();
     printf("Enter your num N:");
     scanf("%d",&n);
     for(i=1;i<=n;i++)
           printf("\n %d",i++);
     getch();
}
(38) Write a program to print 1, 2, 4, 8, 16, 32, 64.
#include<stdio.h>
#include<conio.h>
void main()
{
     clrscr();
     int i;
     for(i=1;i<=8;i++)
           printf("%d \n",i*i);
     getch();
```

(39) Write a program to print 1, 10, 2, 9, 3, 8, 4, 7, 5, 6.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i;
    clrscr();
    for(i=0;i<=4;i++)
    {
        printf("%3d",i+1);
        printf("%3d",10-i);
    }
    getch();
}</pre>
```

(40) Write a program to print 1, 11, 20, 28, 35, 41, 46, 50, 53, 55.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a,b;
    clrscr();
    a=1;
    b=10;
    do
    {
        printf("\n %d",a);
        a=a+b;
        b--;
    }
    while(b>0);
    getch();
}
```

(41) Write a program to print the total of 1 to 10.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a;
    clrscr();
```

```
a=1+2+3+4+5+6+7+8+9+10;
printf("%d",a);
getch();
}
```

(42) Write a program to print the total of first 100 even numbers.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,n,sum=0;
    clrscr();
    printf("Even number btw 1-100 \n");
    for(i=1;i<=100;i++)
    {
        if(i%2==0)
        {
            sum=sum+i;
        }
     }
    printf("Sum of all even numbers btw 1-100 is %d",sum);
    getch();
}</pre>
```

(43) Write a program to print the total of first 100 odd numbers.

(44) Write a program to print the total of 1 /2 +2/3 +···..+9/10. #include<stdio.h>

```
#include<conio.h>
void main()
     float i,j,total=0;
     clrscr();
     i=1;
     j=2;
     do
           total=total+(i/j);
           i++;
           j++;
     while(i<10);
     printf("\n total is:%f",total);
     getch();
}
(45) Write a program to print the total of 1-2+3-4+5-6+7-8+9-10.
#include<stdio.h>
#include<conio.h>
void main()
{
     float i, j, total=0;
     clrscr();
     i=1;
     j=2;
     do
     {
           total=total+(i-j);
           i=i+2;
           j=j+2;
```

(46) Write a program to print the total of 0.1+0.02+0.003+0.0004+0.00005.

while (i <= 10);

getch();

}

printf("\n total is:%f",total);

```
#include<stdio.h>
#include<conio.h>
void main()
{
    float i,j=10,total=0;
    clrscr();

    for(i=1;i<=5;i++)
    {
        total=total+(i/j);
        j=j*10;
    }
    printf("\n total is :%f",total);

    getch();
}</pre>
```

(47) Write a program to get 1 number and display its reverse.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int no,temp;
    clrscr();
    printf("\n enter the no:");
    scanf("%d",&no);
    while(no>0)
    {
        temp=no%10;
        printf("%d",temp);
        no=no/10;
    }
    getch();
}
```

(48) Write a program to get 1 number and display sum of its digit.

(49) Write a program to get 1 number and display its factorial.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,fact=1,a;
```

```
clrscr();
printf("Enter a num :");
scanf("%d",&a);

for(i=1;i<=a;i++)
{
    fact=fact*i;
}
printf("Factorial value of %d is: %d",a,fact);
getch();
}</pre>
```

- (50) Write a program to get 1 number and find that it's prime or not.
- (51)Write a program to print 0 1 1 2 3 5 8 13 21 34 55(Fibonacci series).

```
#include<stdio.h>
#include<conio.h>
void main()
{
     int n1=0, n2=1, n3, i, num;
     clrscr();
     printf("Enter the number of elements:-");
     scanf("%d", &num);
     printf("\n%4d%4d",n1,n2); //printing 0 and 1
     for(i=2;i<num;i++) //loop starts from 2 bcz 0 and 1 are already</pre>
prnted
      {
           n3=n1+n2;
           printf("%4d",n3);
           n1=n2;
           n2=n3:
     getch();
}
(52)
              ****
              ****
              ****
              ****
              ****
```

#include<conio.h>

```
#include<stdio.h>
void main()
     int i,j;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=1;j<=5;j++)
                printf("*",i);
           printf("\n");
     getch();
}
(53)
           12345
           12345
           12345
           12345
           12345
#include<conio.h>
#include<stdio.h>
void main()
{
     int i,j;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=1;j<=5;j++)
                printf("%d",j);
           printf("\n");
     getch();
}
```

```
(54)
           11111
           22222
           33333
           44444
           55555
#include<conio.h>
#include<stdio.h>
void main()
{
     int i,j;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=1;j<=5;j++)
                printf("%d",i);
           printf("\n");
     getch();
}
(55)
                             3
                                      5
                         2
                     1
                                  4
                     2
                                  8
                                      10
                         4
                             6
                     3
                         6
                             9
                                  12
                                      15
                     4
                                  16
                                      20
                         8
                             12
                         10 15
                                  20
                     5
                                      25
(56)
                     AAAAA
                    BBBBB
                    CCCCC
                    DDDDD
                    EEEEE
#include<stdio.h>
```

```
#include<conio.h>
void main()
     clrscr();
     char i,j;
     for(i='A';i<='E';i++)
           for(j='A';j<='E';j++)
                 printf("%c",i);
                 printf("\n");
     getch();
}
(57)
           ABCDE
           ABCDE
           ABCDE
           ABCDE
           ABCDE
#include<stdio.h>
#include<conio.h>
void main()
{
     clrscr();
     char i, j;
     for(i='A';i<='E';i++)
           for(j='A';j<='E';j++)
                 printf("%c",j);
                printf("\n");
     getch();
}
(58)
```

\*

```
**
           ***
           ****
           ****
#include<stdio.h>
#include<conio.h>
void main()
     clrscr();
     int i,j;
     for(i=1;i<=5;i++)
           for(j=1;j<=i;j++)
           printf("*");
           printf("\n");
     }
     getch();
}
(59)
           1
           22
           333
           4444
           55555
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j;
     clrscr();
     for(i=1;i<=5;i++)
```

```
for(j=1;j<=i;j++)
           printf("%d",i);
           printf("\n");
     }
     getch();
}
(60)
           1
           12
           123
           1234
           12345
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=1;j<=i;j++)
           printf("%d",j);
           printf("\n");
     }
     getch();
}
```

```
(61)
           5
           54
           543
           5432
           54321
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     for(i=5;i>=1;i--)
           for(j=5;j>=i;j--)
                 printf("%d",j);
           printf("\n");
     getch();
}
(62)
           1
           21
           321
           4321
           54321
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,n;
     clrscr();
     /*printf("\n Here n is the total number of rows to be printed");
     printf("\n Enter N;");
```

```
scanf("%d",&n);*/
     for(i=1;i<=5;i++)
           //logic to print numbers
           for(j=i;j>=1;j--)
                printf("%d",j);
                printf("\n");
     getch();
}
(63)
           1
           2
               3
           4
                5
                     6
                8
                         10
                     9
           11 12 13 14 15
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,n=1;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=1;j<=i;j++)
                printf("%3d",n++);
                printf("\n");
     }
     getch();
}
```

```
(64)
           1
           01
           010
           1010
           10101
#include<stdio.h>
#include<conio.h>
void main()
     clrscr();
     int i,j,n=1;
     for(i=1;i<=5;i++)
           for(j=1;j<=i;j++)
                 printf("%3d",n%2);
                 n++;
           }
                 printf("\n");
     }
     getch();
}
(65)
           1
           10
           10 1
           10 1 0
           10 1 0 1
#include<stdio.h>
#include<conio.h>
void main()
{
     clrscr();
     int i,j,n=1;
     for(i=1;i<=5;i++)
           for(j=1;j<=i;j++)
                printf("%3d",j%2);
```

```
printf("\n");
     }
     getch();
}
(66)
           a
          b c
          d e f
          ghij
          k 1 m n o
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j,n='a';
     clrscr();
     for(i=65;i<=69;i++)
          for(j=65;j<=i;j++)
                printf("%2c",n);
                n++;
                printf("\n");
     getch();
}
(67)
           a
          bb
           ccc
          dddd
           eeeee
```

```
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     for(i=97;i<=101;i++)
           for(j=97;j<=i;j++)
                 printf("%2c",i);
                printf("\n");
     getch();
}
(68)
           \mathbf{z}
           у х
           w v u
               s r q
           p o n m 1
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,n='z';
     clrscr();
     for(i=65;i<=69;i++)
           for(j=65;j<=i;j++)
                 printf("%2c",n);
           }
                printf("\n");
     getch();
}
```

```
(69)
           1
           10
           100
           1000
           10000
#include<stdio.h>
#include<conio.h>
void main()
     int a=1,b,c,d,e;
     clrscr();
     printf("\n %d",a);
     b=a*10;
     c=a*100;
     d=a*1000;
     e=a*10000;
     printf("\n %d",b);
     printf("\n %d",c);
     printf("\n %d",d);
     printf("\n %d",e);
     getch();
}
(70)
           5
           45
           345
           2345
           12345
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     for(i=5;i>=1;i--)
           //logic to print numbers
           for(j=i;j<=5;j++)
                 printf("%d",j);
```

```
}
                 printf("\n");
     getch();
}
(71)
           ****
           ****
           ***
           **
           *
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     for(i=5;i>=1;i--)
           for(j=1;j<=i;j++)
           printf("*",j);
           printf("\n");
     }
     getch();
}
(72)
           12345
           1234
           123
           12
           1
#include<stdio.h>
#include<conio.h>
void main()
{
```

```
int i,j;
     clrscr();
     for(i=5;i>=1;i--)
           for(j=1;j<=i;j++)
           printf("%d",j);
           printf("\n");
     }
     getch();
}
(73)
             2 3 4 5
           1
           2
             4 6 8
           3
             6 9
           4
              8
           5
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j,a=1,b=1;
     clrscr();
     for(i=1;i<=5;i++)
           for(j=i;j<=5;j++)
                printf("%2d",a*b);
           }
           a++;
           b=1;
                printf("\n");
     getch();
}
```

```
(74)
           54321
           5432
           543
           54
           5
#include<stdio.h>
#include<conio.h>
void main()
     clrscr();
     int i, j;
     for(i=1;i<=5;i++)
           for(j=5;j>=i;j--)
           printf("%d",j);
           printf("\n");
     }
     getch();
}
(75)
           54321
           4321
           321
           21
           1
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,n;
     clrscr();
     /*printf("\n Here n is the total number of rows to be printed");
     printf("\n Enter N;");
     scanf("%d",&n);*/
     for(i=5;i>=1;i--)
           //logic to print numbers
           for(j=i;j>=1;j--)
```

```
{
                 printf("%d",j);
           }
                 printf("\n");
     getch();
}
(76)
           12345
           2345
           345
           45
           5
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     /*printf("\n Here n is the total number of rows to be printed");
     printf("\n Enter N;");
     scanf("%d",&n);*/
     for(i=1;i<=5;i++)
           //logic to print numbers
           for(j=i;j<=5;j++)
                 printf("%d",j);
           }
                 printf("\n");
     }
     getch();
}
(77)
           55555
           4444
           333
           22
           1
```

```
#include<stdio.h>
#include<conio.h>
void main()
     int i,j;
     clrscr();
     for(i=5;i>=1;i--)
           for(j=1;j<=i;j++)
           printf("%d",i);
           printf("\n");
     }
     getch();
}
(78)
           abcd e
          bcd e
           c d e
           d e
           е
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j;
     clrscr();
     for(i=97;i<=101;i++)
           //logic to print numbers
           for(j=i;j<=101;j++)
                printf("%c",j);
                printf("\n");
     getch();
}
```

```
(79)
                *
               **
              ***
             ****
            ****
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,k;
     clrscr();
     for(i=1;i<=5;i++)
           for(k=4;k>=i;k--)
                printf(" ");
           for(j=1;j<=i;j++)
                printf("*");
           printf("\n");
     getch();
}
(80)
               1
              22
             333
            4444
           55555
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,k;
     clrscr();
     for(i=1;i<=5;i++)
           for(k=4;k>=i;k--)
```

```
{
                 printf(" ");
           for(j=1;j<=i;j++)
                 printf("%d",i);
                printf("\n");
     getch();
}
(81)
                 1
               12
              123
             1234
            12345
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,k;
     clrscr();
     for(i=1;i<=5;i++)
           for(k=4;k>=i;k--)
                printf(" ");
           for(j=1;j<=i;j++)
                printf("%d",j);
                printf("\n");
     }
     getch();
}
```

```
(82)
                5
               54
             543
            5432
           54321
#include<stdio.h>
#include<conio.h>
void main()
{
     int i,j,k;
     clrscr();
     for(i=5;i>=1;i--)
           for(k=1; k<i; k++)
                 printf(" ");
           for(j=5;j>=i;j--)
                 printf("%d",j);
           printf("\n");
     getch();
}
(83)
                  a
                 bb
                ccc
               dddd
             eeeee
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,k;
     clrscr();
     for(i=1;i<=5;i++)
           for (k=1; k \le 5-i; k++)
           {
```

```
printf(" ");
           for(j=1;j<=i;j++)
                 printf("%c",i+96);
           }
                 printf("\n");
     getch();
}
(84)
                         *
                                   *
                                       *
#include<stdio.h>
#include<conio.h>
void main()
     clrscr();
     int i,j,k;
     for(i=1;i<=5;i++)
           for(k=4;k>=i;k--)
                 printf(" ");
           for(j=1;j<=i;j++)
                 printf("* ");
                 printf("\n");
```

getch();

}

- (85) Write a program to initialize a single dimension array with 5 elements and display it.
- (86) Write a program to get 5 numbers in a 1D-array and display it.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    char ch[]={'a','b','c','d'};

    for(int i=0;i<=3;i++)
    {
        printf("\n %c",ch[i]);
    }

    getch();
}</pre>
```

(87) Write a program to get 10 numbers in a 1D-array and find how many is positive, negative and zero.

```
#include<stdio.h>
#include<conio.h>
void main()
     int a[10];
     int i, b=0, c=0, d=0;
     clrscr();
     printf("\n Enter 10 no.:");
     for(i=0;i<10;i++)
           scanf("%d",&a[i]);
     for(i=0;i<10;i++)
           if(a[i]>0)
                 b++;
           else if (a[i]<0)
                 C++;
            }
           else
            {
                 d++;
      }
```

```
printf("\n positive:%d",b);
printf("\n negative:%d",c);
printf("\n zero:%d",d);

getch();
}
```

(88) Write a program to get 10 numbers in a 1D-array and find how many numbers are odd and even.

```
#include<stdio.h>
#include<conio.h>
void main()
     int a[10];
     int i, b=0, c=0;
     clrscr();
     printf("\n Enter 10 no:");
     for(i=0;i<10;i++)
           scanf("%d",&a[i]);
     for(i=0;i<10;i++)
                          //do not write = sign in array program
           if(a[i]%2==0)
                b++;
           }
           else
                C++;
     printf("\n Even:%d",b);
     printf("\n Odd:%d",c);
     getch();
}
```

(89) Write a program to get 10 numbers in a 1D-array and print the total of all array elements.

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

```
int a[10];
int i,b=0;
clrscr();
printf("\n Enter 10 no.:");
for(i=0;i<10;i++)
{
        scanf("%d",&a[i]);
}
for(i=0;i<10;i++)
{
        b+=a[i];
}
printf("\n Sum of the all no.:%d",b);
getch();
}</pre>
```

(90) Write a program to get 5 numbers in a 1D-array and find max number from it

```
#include<stdio.h>
#include<conio.h>
void main()
     int a[10];
     int i,b;
     clrscr();
     printf("\n Enter 10 no:");
     for(i=0;i<10;i++)
           scanf("%d", &a[i]);
     b=a[0];
     for(i=0;i<10;i++)
           if(a[i]>b)
                b=a[i];
     printf("\n Max number from array %d",b);
     getch();
}
```

(92) Write a program to get 10 numbers for an array and then get 1 number to search in that array, check it found or not.

```
#include<stdio.h>
#include<conio.h>
void main()
     int i,j,cnt=0;
     int a[10];
     clrscr();
     printf("Enter 10 num:-\n");
     for(i=0;i<10;i++)
           scanf("%d",&a[i]);
     printf("Enter num for search:-\n");
     scanf("%d",&j);
     for(i=0;i<10;i++)
           if(a[i]==j)
                 cnt++;
     if(cnt==0)
           printf("\n element is not found");
     else
           printf("\n element is found");
     getch();
}
```

## (93) Write a program to initialize a 2 row and 3 column 2D array and display it.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int mat[2][3];
    int i,j;
    clrscr();
    printf("Enter the value of matrix:\n");
    for(i=0;i<=1;i++)
    {
        for(j=0;j<=2;j++)
        {
            scanf("%d",&mat[i][j]);
        }
}</pre>
```

## (94) Write a program to get numbers for 3 rows and 3 column 2D array and display it.

```
#include<stdio.h>
#include<conio.h>
void main()
     int mat[3][3];
     int i,j;
     clrscr();
     printf("Enter the value of matrix:\n");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                printf("\n Enter array element
no:%d,%d:-",i+1,j+1);
                scanf("%d",&mat[i][j]);
     printf("Printing array in matrix form:\n");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                printf("\t");
                printf("%d", mat[i][j]);
           printf("\n");
     getch();
}
```

(95) Write a program to get two 3row-3col 2D arrays and print its addition.

```
#include<stdio.h>
#include<conio.h>
void main()
     int a[3][3],b[3][3],c[3][3];
     int i, j;
     clrscr();
     printf("Enter 1st matrix numbers:-\n");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                printf("Enter matrix element:-%d,%d::",i+1,j+1);
                scanf("%d",&a[i][j]);
           }
     }
     printf("Enter 2nd matrix numbers:-\n");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                printf("Enter matrix element:-%d,%d::",i+1,j+1);
                scanf("%d",&b[i][j]);
           }
     // addition of two matrix
     printf("\n Sum of two element :-");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                c[i][j] = a[i][j] + b[i][j];
     printf("\n Resultant matrix:-\n");
     for(i=0;i<=2;i++)
           for(j=0;j<=2;j++)
                printf("%3d\t",a[i][j]);
           printf("+");
           for(j=0;j<=2;j++)
```

(96) Write a program to get values for 4row-5col 2D array and print row wise total, column wise total and grand total.

```
#include<stdio.h>
#include<conio.h>
void main()
     int a[4][5];
     int i, j;
     clrscr();
     printf("Enter the number of matrix:-\n");
     for(i=0;i<=3;i++)
           for(j=0;j<=4;j++)
                 printf("Enter mat1 element:-%d%d::",i+1,j+1);
                 scanf("%d",&a[i][j]);
           }
     for(i=0;i<=3;i++)
           for(j=0;j<=4;j++)
                 printf("%d",a[i][j]);
           printf("\n");
     getch();
}
```

(107) Create a user define function (UDF) which get and print name of user.

```
#include<stdio.h>
#include<conio.h>
void devin()
{
    printf("\n HELLO");
}
void rutu()
{
    char name[60];
    printf("\n Enter your name :");
    scanf("\n %s", &name);
    printf("\n Your name is %s", name);
}
void main()
{
    clrscr();
    devin();
    rutu();
    getch();
}
```

(108) Create a function which take 2 arguments and print its sum.

```
#include<stdio.h>
#include<conio.h>
void d()
{
     int a,b,c;
     printf("Enter num1 :",a);
     scanf("%d",&a);
     printf("Enter num2 :",b);
     scanf("%d", &b);
     c=a+b;
     printf("Your sum is : %d",c);
}
void main()
     clrscr();
     d();
     getch();
}
```

(111)Create a function which takes 1 argument and print it is odd or even.

```
#include<stdio.h>
#include<conio.h>
void rutu()
     int a;
     printf("Enter a num :");
     scanf("%d",&a);
     if(a%2==0)
           printf("Here is even num %d");
     }
     else
     {
           printf("Here is odd num %d");
}
void main()
     clrscr();
     rutu();
     getch();
}
```