```
// Programm of Arithmatic Expression.
# include < stdio.h >
# include < conio.h >
main ()
{
int sum, mul, div, mod, sub, a, b;
int c;
clrscr ();
printf ("Enter the value of a = ");
scanf ("%d", &a);
printf ("Enter the value of b = ");
scanf ("%d", &b);
printf ("----------\n");
printf ("1 Addition \n");
printf ("2 Multiplication \n");
printf ("3 Division \n");
printf ("4. Substraction \n");
printf ("5 modulo \n");
printf ("---------- \n");
printf ("Enter your choise = ");
scanf ("%d", &c);
switch (c)
{
  case 1: sum = a + b;
          printf ("Sum is = %d\t", sum);
          break;
  case 2 : mul = a * b;
          printf ("mul is = %d \t", mul);
          break;
  case 3 : div = a/b;
          printf ("div is = %d\t", div);
          break;
  Case 4 : Sub = a - b;
          printf ("Substraction is = %d \t" sub);
          break;
```

```
    Case 5: mod = a % b;
            printf ("modulo is = %d\t", mod");
            break;
    default: printf ("\n please enter the proper choise");
            break;
}
    getch ();
    return 0;
}
```

Scanned by CamScanner

```
/* FACTORIAL OF A Number */
# include < stdio.h >
# include < conio.h >
main ()
{
   int n, i, fact = 1;
   clrscr ();
   printf ("\n\n\n\n\n\n\n\n\n\n");
   printf ("Enter a number \n");
   scanf ("%d", &n);
   for (i= 1; i<=n; i++)
{
   fact = fact * i;
}
   printf ("factorial of the number is %d \n", fact);
   getch ();
}
```

Q6.

// Programm for relational operator

```
# include <stdio.h>
# include <conio.h>
void main ()
{
  int my.age, your age ;
  clrscr ();
  printf ("enter my age :-);
  scanf ("%d", & my age );
  printf (" enter your age);
  if ( my - age == your age )
  printf (" we are born in the same year");
  else
  printf (" we are born in different year");
  getch ();
}
```

Q.

// Program for checking given number is palindrome

```
# include < stadio.h >
# include < conio.h >
 main ()
{
  int n, rev = 0, rem, ori ;
  clrscr ();
  printf ("Enter an Integer \n");
  scanf ("%d", & n);
  ori = n;
  while (n != 0)
{
  rem = n % 10 ;
  rev = rev * 10 + rem ;
  n = n / 10;
}
   if (ori = = rev)
{
  printf ("\n number is palindrome \n");
}
  else
{
  printf ("number is not palindrome ");
}
  getch ();
}
```

// Programm for Amstrong number.

```
# include <stdio.h>
# include <conio.h>
main ()
{
  int n, rev = 0, rem, ori;
  clrscr ();
  printf ("Enter an Integer \n");
  scanf ("%d", &n);
  ori = n;
  while (n != 0)
{
   rem = n % 10;
   rev = rem * rem * rem + rev;
   n = n/10;
}
  if (ori == rev)
{
  printf ("\n number is Atmstrong \n");
}
  else
{
  printf (" number is not Armstrong ");
}
  getch ();
}
```

Qn.

// Programm for fibbonacci series

```
# include <stdio.h>
# include <conio.h>
 main ()
{
  int a = 0, b = 1, c, limit, count;
  clrscr ();
  printf ("Enter the limit of series \n");
  scanf ("%d", &limit);
  printf ("enter the value of frist term \n");
  printf ("\n%d", a);
  printf ("\n%d", b);
  count = 2;
  while (count < limit)
{
   c = a+b;
   count ++
   printf ("\n%d", c);
   a = b;
   b = c;
}
   getch ();
}
```

Q7.

```
// Program for Matrix of Addition
# include <stdio.h>
# include <conio.h>
  main ()
{
  int a [2][2], b [2][2], c[2][2], i, j;
  clrscr ();
  printf ("Enter the matrix A\n");
  for (i=0; i<2; i++)
{
  for (j=0; j<2; j++)
{
  scanf ("%d", &a [i][j]);
}
  printf ("\n");
}
  printf ("Enter the matrix B\n");
  for (i=0; i<2; i++)
{
  for (j=0; j<2; j++)
{
  scanf ("%d", &b [i][j]);
}
  printf ("\n");
}
  printf ("Addition of A and B\n");
  for (i=0; i<2; i++)
{
  for (j=0; j<2; j++)
{
  c [i][j] = a[i][j] + b[i][j];
}
}
```

```
    printf ("Addition is = -\n");
    for (i=0; i<2; i++)
{
    for (j=0; j<2; j++)
{
    printf ("%d\t", c[i][j]);
}
    printf ("\n");
}
    getch ();
}
```

// Programm for Matrix of Substraction

```
# include <stdio.h>
# include <conio.h>
main ()
{
  int a[2][2], b[2][2], c[2][2], i,j ;
  clrscr ();
  printf ("Enter the matrix A\n");
  for (i=0; i<2 ; i++)
{
  for (j=0; j<2 ; j++)
{
  scanf ("%d", &a[i][j]);
}
  printf ("\n");
}
  printf ("Enter the matrix B\n");
  for (i=0; i<2 ; i++)
{
  for (j=0; j<2 ; j++)
{
  scanf ("%d", &b[i][j]);
}
  printf ("\n");
}
  printf ("Substraction of A and B \n");
  for (i=0; i<2 ; i++)
{
  for (j=0; j<2 ; j++)
{
  c[i][j] = a[i][j] - b[i][j]
 }
}
```

```
    printf ("substraction is = -\n");
    for (i=0; i<2; i++)
{
    for (j=0; j<2; j++)
{
    printf ("%d\t", c[i][j]);
}
    printf ("\n");
}
    getch();
}
```

Write a programe for function overloading.

```
# include <stdio.h>
# include <conio.h>
void swap (int x, int y)
{
 int t;
 t = x;
 x = y;
 y = t;
 printf ("\n%d %d", x, y);
}
 void swap (float x, float y)
{
 float t;
 t = x;
 x = y;
 y = t;
 printf ("\n%f %f", x, y);
}
 void main ()
{
 float cha 1, cha 2;
 int a, b;
 clrscr ();
 printf ("enter any two float no\n");
 scanf ("%f %f", & cha 1, &cha 2);
 swap (cha 1, cha 2);
 printf ("Enter any two numbers");
 scanf ("%d%d", &a, &b);
 swap (a, b);
 getch ();
}
```

Write a program for swaping to integrate no.s using call by value & call by reference.

```
# include <stdio.h>
# include <conio.h>
void swap (int *x, int *y)
{
  int t;
  printf ("value of x & y before swaping :-\t%d %d",
          *x, *y);
  t = *x
*x = *y;
*y = t;
 printf ("\n value of x & y after swaping :- t%d %d";
          *x, *y);
}
 void main ()
{
  int a, b;
  clrscr ();
  printf ("enter the two integer \n");
  scanf ("%d %d", &a, &b);
  swap (&a, &b);
  getch ();
}
```

```
# include <stdio.h>
# include <conio.h>
void swap (int x, int y)
{
  int t;
printf ("value of x & y before swaping :- \t%
      x, y);
```

```
    t = x;
    x = y;
    y = t;
printf ("\n value of x & y after swaping :- \t %d %d",
        x, y);
}
  void main ()
{
  int ch1, ch2;
  clrscr ();
  printf (" enter two integers \n");
  scanf (" %d , %d", &ch1, &ch2);
  swap ( ch1, ch2);
  getch ();
}
```

Q.

Write a programme to demonstrate string function

```
# include < stdio.h>
# include < string.h>
# define size 26.
 void main ()
{
 char s1 [size];
 char s2 [size];
 int s3;
 clrscr;
 printf (" Enter first string");
 gets (s1);
 printf ("Enter second string");
 get s (s2);
 strlen (s1);
 printf ("given string length : \t %s", strlen);
 printf ("----------");
 strcpy (s2, s1);
 printf ("\n given string is copied : \t %s" s2);
 printf ("----------");
 pristrev (s1);
printf (" given string is reversed : /t %s", s1);
 printf ("----------");
 strcat (s1, s2);
 printf ("\n concatentation string is : \t %s", s1);
 printf ("----------");
 strupr (s1);
 printf ("given string is upper case letter: \t %s", s1)
 printf ("----------");
 strlwr (s2);
 printf (" given string is lowercase letter : t %s", s2)
 printf ("----------");
 getch ();
}
```

Write a program to Demonstrate Pointer variable.

```
# include <stdio.h>
# include <conio.h>
 void main ()
{
  int * p;
  int q;
 clrscr ();
  q = 20;
   p = & q;
 printf ("%d", * p);
 getch ();
}
```

```
      # include <stdio.h>
      # include <conio.h>
  void main ()
{
 int *p;
 int **p1;
  int a;
clrscr ();
 p = &a;
 p1= &p;
*p = 100;
 printf ("%d", a);
** p1 = 200;
 printf ("\n%d", a);
 a = 300
printf ("\n%d", ** p1);
 getch ();
}
```

Write a pre grame to demonstrate strucJute.

```
#include <stdio.h>
#include <conio.h>
void main ()
struct student
{
int roll no;
char name [20];
char branch [10];
int marks;
};
void main ()
{
struct student st;
clrscr ();
printf ("enter data for student:");
scanf ("%d", st.roll no);
flush all ();
gets (st.name);
flushall ();
gets (st.branch);
printf ("Total marks");
scanf ("%d", st.marks);
printf ("student report");
printf ("Roll no : %d \t" st.roll no");
printf ("\n name : %s" st.name);
printf ("\n brooch - 1"5") st.branch);
printf ("\n total marks : %d", st.marks);
getch ();
}
```