#### **ASSIGNMENT:1**

1>Write a C program to enter two numbers and perform all arithmetic operations.

### ANS.

```
#include<stdio.h>
int main()
{
  int a,b,pr,add,sub;
 float q;
  printf("enter the values of a and b\n");
  scanf("%d %d",&a,&b);
  add=a+b;
  printf("the addition of %d and %d is=%d\n",a,b,add);
  sub=a-b;
  printf("the substraction of %d and %d is=%d\n",a,b,sub);
  pr=a*b;
  printf("the multiplication of %d and %d is =%d\n",a,b,pr);
  q=a/b;
 printf("the division of %d and %d is=%f\n",a,b,q);
}
```

# Output:

```
enter the values of a and b
45
5
the addition of 45 and 5 is=50
the substraction of 45 and 5 is=40
the multiplication of 45 and 5 is =225
the division of 45 and 5 is=9.000000
```

2. Write a C program to enter temperature in Celsius and convert it into Fahrenheit

#### Ans:

```
#include<stdio.h>
int main()
{
    float cel,far;
    printf("enter the value of temperature in celcius\n");
    scanf("%f",&cel);
    far=(9*cel+160)/5;
    printf("the value of temperature in fahrenheit is %f",far);
}
```

### Output:

```
enter the value of temperature in celcius
45
the value of temperature in fahrenheit is 113.000000>
```

3. Write a C program to enter the radius of a circle and find its diameter, circumference and area.

#### Ans:

```
#include<stdio.h>
int main()
```

```
int r,d;
float area,cir;
printf("enter the radius of the circle\n");
scanf("%d",&r);
d=2*r;
printf("the diameter of the circle is %d\n",d);
area=3.14*r*r;
printf("the area of the circle is %f\n",area);
cir=2*3.14*r;
printf("the circumference of the circle is %f\n",cir);
}
```

### Output:

```
enter the radius of the circle
42
the diameter of the circle is 84
the area of the circle is 5538.959961
the circumference of the circle is 263.760010
```

4. Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:

Percentage >= 90% : Grade A

Percentage >= 80% : Grade B

Percentage >= 70% : Grade C

Percentage >= 60% : Grade D

Percentage >= 40% : Grade E

# Percentage < 40% : Grade F

### Ans:

```
#include<stdio.h>
int main()
{
  int p,c,b,m,com,s;
  float avg;
  printf("enter the marks in phy,che,bio,math and com respectively\n");
  scanf("%d %d %d %d %d",&p,&c,&b,&m,&com);
  s=p+c+b+m+com;
  avg=s/5.0;
  printf("the percentage of mark secured by the student is %f\t",avg);
  if(avg>=90)
  {
    printf("grade_A\n");
  }
  else if(avg>=80)
  {
    printf("grade_B\n");
  }
  else if(avg>=70)
  {
    printf("grade_C\n");
  }
  else if(avg>=60)
  {
    printf("grade_D\n");
  }
```

```
else if(avg>=40)
{
    printf("grade_E\n");
}
else
{
    printf("grade_F\n");
}
```

# Output:

```
enter the marks in phy,che,bio,math and com respectively
99
99
99
99
99
the percentage of mark secured by the student is 99.000000 grade_A
```

5. Write a C program to check whether an alphabet is vowel or consonant using switch case.

### Ans:

```
#include<stdio.h>
int main()
{
   char ch;
   printf("enter any alphabet\n");
   scanf("%c",&ch);
   switch(ch)
   {
     case'a':case'A':
```

```
printf("vowel\n");
      break;
    case'e':case'E':
      printf("vowel\n");
      break;
    case'i':case'I':
      printf("vowel\n");
      break;
    case'o':case'0':
      printf("vowel\n");
      break;
    case'u':case'U':
      printf("vowel\n");
      break;
    default:
      printf("consonant\n");
      break;
 }
}
Output:
```

enter any alphabet

d

consonant