Practical-1:Basic Input/Output Operation

1. Program to read two integers and two floating point numbers.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int a=2,b=5;
  float x=2.5,y=3.9;
  clrscr();
  printf("%d,%d\n",a,b);
  printf("%f,%f",x,y);
  getch();
}
```

2. Program to accept the marks of 5 subjects and find the sum and percentage marks obtained by student.

```
#include <stdio.h>
int main() {
  int s1,s2,s3,s4,s5,sum,percentage;
  printf("enter the marks of 5 subjects:");
  scanf("%d%d%d%d%d",&s1,&s2,&s3,&s4,&s5);
  sum=s1+s2+s3+s4+s5;
  percentage=sum/5;
  printf("sum=%d",sum);
  printf("percentage=%d",percentage);
}
```

3. <u>Program to calculate the simple interest and compound interest(the principal,amount,rate of interest, and time are entered through keyboard).</u>

```
#include <stdio.h>
int main() {
  int SI,CI,A,T,R,P;
  printf("enter the value of principal,amount,rate of interest,time");
  scanf("%d%d%d%d",&P,&A,&R,&T);
  SI=(P*R*T)/100;
  CI=A-P;
  printf("simple interest:%d,compund interest:%d\n",SI,CI);
}
```

4. program to calculate the area and circumference of circle.

```
#include <stdio.h>
int main() {
  float A,C,r,pi=3.14;
  printf("enter the value of r:");
  scanf("%f",&r);
  A=pi*r*r;
  C=2*pi*r;
  printf("Area:%f",A);
  printf("Circumference:%f",C);
  return 0;
}
```

5. Program to accept temperature in centigrade and converts into Fahrenheit using the formula c/5=(f-32)/9.

```
#include <stdio.h>
void main() {
  float F,C;
  printf("entered the temperature in centigrade:");
  scanf("%f",&C);
  F=(C*9)/5+32;
  printf("temperature in fahrenheit:%f",F);
}
```

6. Program to swap values of two variables using a third variable.

```
#include <stdio.h>
void main() {
  int a,b,temp;
  printf("enter the value of a and b:");
  scanf("%d%d",&a,&b);
  temp=a;
  a=b;
  b=temp;
  printf("value of a and b after swapping:%d %d\n",a,b);
}
```

7. Program that swap the values of two variable without using a third variable.

```
#include <stdio.h>
void main() {
  int a,b;
  printf("enter the value of a and b:");
  scanf("%d%d",&a,&b);
  a=a+b;
  b=a-b;
  a=a-b;
  printf("after swap a=%d b=%d\n",a,b);
}
```

8. Program to calculate and print the area of triangle, where the three sides of triangle is given as input.

```
#include <stdio.h>
#include<math.h>
void main() {
  int a,b,c,s;
  float A;
  printf("enter the value of three sides of triangle:");
  scanf("%d%d%d",&a,&b,&c);
  s=(a+b+c)/2;
  A=sqrt((s)*(s-a)*(s-b)*(s-c));
  printf("Area:%f",A);
}
```