PRACTICAL – 4

a) Write a program to print area of square using function.

```
#include <stdio.h>
void carea()
{
    float r=7;
    float a;
    a=3.14*r*r;
    printf("Area of Circle=%f",a);
}
int main()
{
    carea();
    return 0;
}
```

OUTPUT :

```
Area of Circle=153.860001
```

b) Write a program using recursive function.

```
/*Program to find the factorial of a number using recursive function.*/
#include <stdio.h>
int fact (int num);
int main( )
{
    int num;
    printf("Enter a positive integer: ");
    scanf("%d", &num);
    printf("Factorial of %d = %d", num, fact(num));
    return 0;
}
int fact (int num)
{
    if (num >= 1)
    return num* fact (num-1);
```

```
    else
    return 1;
}
```

OUTPUT :

Enter a positive integer: 3

Factorial of 3 = 6

c) Write a program to square root, abs() value using function.

```
#include <stdio.h>
#include <math.h>
int main()
{
    int num, a;
    printf("Please enter a number : \n");
    scanf("%d", &num);
    a = abs(num);
    printf("Calculated absolute value is : %d\n", a);
    a = sqrt(num);
    printf("Calculated Squareroot value is : %d\n", a);
    return 0;
}
```

OUTPUT :

Please enter a number :

4.5

Calculated absolute value is : 4

Calculated Squareroot value is : 2

d) Write a program using goto statement.

```
#include <stdio.h>
int main( )
{
    int n;
    for (; ; )                          /* infinite loop */
```

```
{
    printf("Enter any number : ");
    scanf("%d",&n);
    if (n == 5)
        goto ap;                          /* use of goto statement*/
    if (n % 2 == 0)
        continue;                         /* use of continue statement */
    if (n % 3 == 0)
        break;                            /* use of break statement */
    printf("Inside loop ");
    }
    ap:
    printf("Outside loop ");
return 0;
}
```

OUTPUT :

```
Enter any number: 2
Enter any number: 3
Outside loop
```