EXPERIMENT NO. 1

Familiarization with computer hardware and programming environment, concept of naming the program files, storing, compilation, execution and debugging. Taking any simple C- code.

THEORY / HYPOTHESIS:

- To print Hello world on terminal / screen using printf function.
- Command to create file – gedit filename.c
- Command to compile – gcc filename.c
- Command to execute - ./a.out

1a) // TO PRINT HELLO WORLD

```
#include <stdio.h>
void main()
 {
        printf("Hello World\n");
 }
```

OUTPUT:

```
Hello World
```

1b) // TO FIND THE AREA AND THE CIRCUMFERENCE OF THE CIRCLE

```
#include <stdio.h> /*preprocessor directive*/

#define PI 3.14    /* definition section */

float area, circumference;  /*global declaration section*/

void main()

{

        float r;  /*local declaration part*/

        printf("Enter the radius of the circle\n");  /*executable part starts here*/

        scanf("%f",&r);

        area=PI*r*r;

        circumference=2*PI*r;

        printf("Area of the circle is %f\n",area);

        printf("Circumference of the circle is %f\n",circumference);

}
```

OUTPUT:

Algorithm:

Input: radius of the circle

Output: area and circumference of the circle

Step 1: start

Step 2: assign PI = 3.1415927

Step 3: read radius

Step 4: compute area of the circle

area = PI * radius * radius

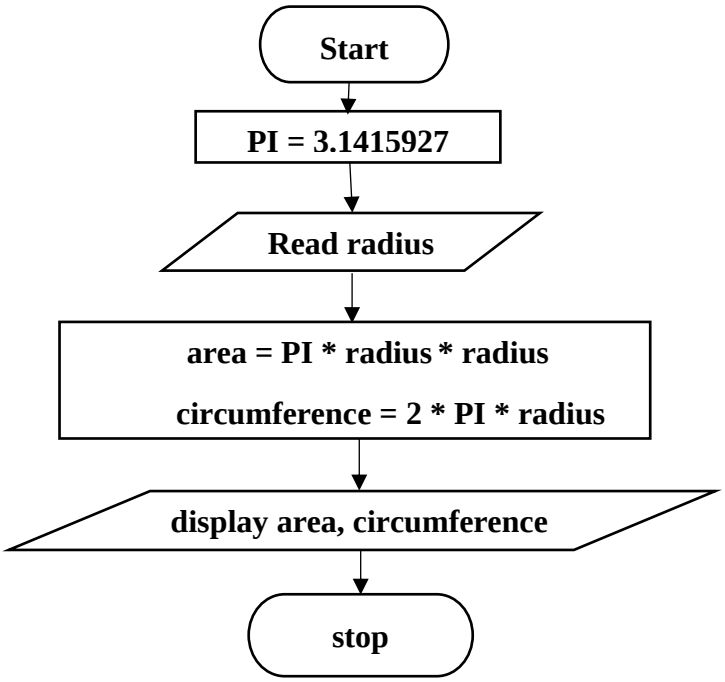
Step 5: compute circumference of the circle

circumference = 2 * PI * radius

Step 6: display area, circumference

Step 7: stop

Flowchart:



1c) //C PROGRAM TO PRINT A CHARACTER

```
#include <stdio.h>
void main()
{
        char b;
        printf("Enter a character\n");
        scanf(“%c”,&b);
        printf(“The character is %c\n”,b);
}
```

OUTPUT:

1d) //C PROGRAM TO PRINT MY NAME

```
#include <stdio.h>
void main()
{
        char name[20];
        printf("Enter your name\n");
        scanf(“%s”,name);
        printf(“My name is %s\n”,name);
}
```

OUTPUT: