C-Programming Lab Sheet
I Year / I Part
Faculty: Computer/Electrical

Labsheet#1

Objectives:
1. Execution of a sample program
2. printf(), scanf()
3. Data Types and Declaration
4. Keywords
5. Escape Sequence

Obeciive#1: Execution of a sample program.

Type the following program and see the output.

```
#include<stdio.h>
#include<conio.h>

void main(){
        printf("This is my first C program");
        getch();
}
```

Activity: To compile: Alt+F9, To run: Ctrl+F9, To save F2, give file name and .C externsion before saving. Run this program without getch(). Run this program with clrscr() before printf(). Remove the semicolons and run the program. Right click on printf() and read the help of printf() function. Similarly right click on getch() to know more about it. In this everything can be studied using help. To skip certain portion of program by compiler, enclose in /* */. This enclosing process is called commenting.

Objective#2: printf(), scanf()

Type the following program and run with different input.

```
#include<stdio.h>
#include<conio.h>

void main(){
      int s, a,b, c=20;   /*variable declaration */
      printf("Enter value of a");  /*to display message on the screen */
      scanf("%d",&a);  /* to give value of a */
      printf("Enter value of b");  /*to display message on the screen  */
      scanf("%d",&b);    /* to give values of b */
      s=a+b;     /*   processing   */
      printf("Sum=%d",s);    /*  to display value stored at s*/
      printf("a*20 = %d",a*c);
      getch();   /* to make program wait until user enters any character*/
}
```

Activity: Right click on int, printf, scanf, getch, void, main, include, stdio.h, conio.h and study more about the terms.

Objective#3: Data type and declaration.
Type the following program and run and discuss the output.

```
#include<stdio.h>
#include<conio.h>

void main(){
      int a; float b; char c;
      clrscr();
      a=3; b=3; c='p';
      a=a*2.3;
      b=b*2.3;
      printf("\n a=%d",a);
      printf("\n b=%.2f",b);
      printf("\n c=%c",c);
      getch();
}
```

Activity: Write a program to input int, float and character data type and display it.

Objective#4: Keywords

```
#include<stdio.h>
#include<conio.h>

void main(){
      int for;
      printf("Enter the value of for");
      scanf("%d",&for);
      printf("%d",for);
      getch();
}
```

Activity: Discuss about the error message and modify the program to get no error message.

Objective#5: Escape Sequences

```
#include<stdio.h>
#include<conio.h>

void main(){
      printf("Hello!\n How are you");
      getch();
}
```

Activity: Replace '\n' with '\t' and note the output, what is difference between two.

Lab Exercises (please code yourself and show the output to instructor)

1. WAP that evaluates area of a circle using symbolic constant.
2. WAP to add two numbers (5 & 7) and display its sum.
3. WAP to multiply two numbers (10 & 8) and display its product.