

An undertaking of Bhaktapur Municipality
KHWOPA COLLEGE OF ENGINEERING

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Department of Computer Engineering

Lab Sheets of C-Programming

for

Computer/Electrical/Civil (I Year / I Part)

2074

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

Labsheet#1

Objectives:

1. Execution of a sample program
2. printf(), scanf()
3. Constant
4. Variables
5. Operators
6. Data Types and Declaration
7. Keywords
8. Escape Sequence

Obeciive#1

```
#include<stdio.h>
void main(){
    printf("Welcome to C");
    getch();
}
```

Assignment:

1.1 Note the output of the above program and modify the above program as below and note down the output of the modified program and discuss the difference between them.

```
#include<stdio.h>
#include<conio.h>
void main(){
    clrscr();
    printf("Welcome to C");
    getch();
}
```

Objective#2

```
#include<stdio.h>
#include<conio.h>
void main(){
    int a;
    clrscr();
    printf("Enter the value of a: ");
    scanf("%d",&a);
    printf("Entered value, a = %d",a);
    getch();
}
```

Objective#3

```
#include<stdio.h>
#include<conio.h>
#define PI 3.1415
void main(){
    float a,r;
    clrscr();
    r=5;
    a=PI*r*r;
    printf("\na=%.2f",a);
    getch();
}
```

Objective#4

```
#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("\na=%d",a);
    printf("\nb=%.2f",b);
    printf("\nc=%c",c);
    getch();
}
```

Objective#5

```
#include<stdio.h>
#include<conio.h>
void main(){
    int a,b,sum,sub,mul,div,rem;
    clrscr();
    printf("Enter the value of a: ");
    scanf("%d",&a);
    printf("Enter the value of b: ");
    scanf("%d",&b);
    sum=a+b;
    printf("\nSum = %d",sum);
    sub=a-b;
    printf("\nSub = %d",sub);
    mul=a*b;
    printf("\nMul = %d",mul);
    div=a/b;
    printf("\nDiv = %d",div);
    rem=a%b;
    printf("\nRem = %d",rem);
    getch();
}
```

Objective#6

```
#include<stdio.h>
#include<conio.h>
void main(){
    int a;  short b;  long c;  unsigned d;
    float e;  double f;
    char g;  char word[30];
    clrscr();
    printf("int short long unsigned float double char word\n");
    scanf("%d, %hd, %ld, %lu, %f, %lf, %c, %s",&a,&b,&c,&d,&e,&f,&g,word);
    printf("%d, %hd, %ld, %lu, %f, %lf, %c, %s",a,b,c,d,e,f,g,word);
    getch();
}
```

Objective#7 Keywords

```
#include<stdio.h>
#include<conio.h>
void main(){
    int for;
    printf("Enter the value of for: ");
    scanf("%d",&for);
    printf("%d",for);
    getch();
}
```

Assignment:

7.1 Note the error message and comment the program.

7.2 Modify the program to get no error message.

Objective#8 Escape Sequence

```
#include<stdio.h>
#include<conio.h>
void main(){
    printf("Welcome to\nDepartment of Computer Engineering");
    getch();
}
```

Assignment:

8.1 Replace '\n' with '\t' and note the output, what is difference between them?

Objective#8.2

```
#include<stdio.h>
#include<conio.h>
void main(){
    int a; float b; char c;
    a=3;b=3.3,c='p';
    printf("a = %d\nb = %d\nc = %d",a,b,c);
    getch();
}
```

Assignment:

8.2.1 Note the error message and comment.

8.2.2 Modify the program to get no error message.