



CSE115L Week:01 Lab: 02

Name:

ID:

Section:

Example 1: Data types and their size in C

```
#include<stdio.h>

int main()
{
    int a;
    float b;
    double c;
    char d;
    long int longInt;
    signed int no;
    printf("Size of int: %d bytes\n",sizeof(a));
    printf("Size of float: %d bytes\n",sizeof(b));
    printf("Size of double: %d bytes\n",sizeof(c));
    printf("Size of char: %d byte\n",sizeof(d));
    printf("Size of Long int: %d byte\n",sizeof(longInt));
    printf("Size of signed int: %d byte\n",sizeof(no));
    return 0;
}
```

Example 2: Write a program that reads in the radius of a circle and prints the circle's diameter, circumference and area.

```
#include<stdio.h>
int main()
{
    float const PI = 3.142;
    float radius, area, circumference, diameter;
    printf("Enter the radius of a circle:");
    scanf("%f",&radius);
    diameter= 2*radius;
    circumference= 2*PI*radius;
    area= PI * radius * radius;
    printf("The Diameter is: %.2f \n",diameter);
}
```

```
printf("The Circumference is: %.2f \n",circumference);  
printf("The area is: %.2f \n",area);  
return 0;  
}
```

Task 1. Convert Celsius to Fahrenheit unit using the following formula. Take the value of C as input from user and calculate the value of F.

$$F = (9/5) * C + 32$$

sample input output:

25°C : 77° F

30°C : 86° F

Task 2. Ask user for two integers a and b. Then swap (interchange) the values of a and b. That means, a should get the value of b and b should get the value of a.(maximum one temporary variable allowed)

Input:

Enter a: 7

Enter b: 3

Output:

After swapping, a: 3 and b:7

Task 3. Now perform swap asked in previous question by performing mathematical operations.(without using temporary variable)

Input:

Enter a: 10

Enter b: 15

Output:

After swapping, a: 15 and b: 10