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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);
```

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```
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
```