
Example 3: Data types and their size in C.	**Example 4:** 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(){
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));
	#include<stdio.h
	> int main()
	{
	float const PI = 3.142;
	float radius;
	float 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("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;
}
```

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

Summary

scanf (use to take input from user)	**printf(display something on the screen)**
%d use to take integer input **%f use to take floating number input** **%s string input** **%c character input** **%lf use to take double number input**	**%d to display integer** **%f to display float or double** **%c to display character** **%s to display string**

NOTES: To take string as input including 'Space' use gets(stringVariableName).

Task 1. Write a program that asks the user to enter two numbers, obtains the two numbers from the user and prints the sum, product, difference, quotient and remainder of the two numbers.

Input:	Output:
Insert first number: 10 Insert second number: 5	Sum = 15 Product = 50 Difference = 5 Quotient = 2 Remainder = 0

Task 2. Write a program that reads in 3 numbers and prints their average.

Input:	Output:
Insert first number: 3 Insert second number: 8 Insert third number: 2	The average is: 4.3

Task 3: Convert Celsius to Fahrenheit unit using the following formula. Take the value of C as input from user and calculate the value of F.

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

Home Tasks

1. 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.
   Enter a: 7
   Enter b: 3
   After swapping, a: 3 and b: 7