C Basic Declarations and Expressions

**1.** Write a C program to print your name, date of birth. and mobile number.   
*Expected Output*:

Name : Alexandra Abramov

DOB : July 14, 1975

Mobile : 99-9999999999

**2.** Write a C program to print a block F using hash (#), where the F has a height of six characters and width of five and four characters.   
*Expected Output*:

######

#

#

#####

#

#

#

**3.** Write a C program to print a big 'C'.   
*Expected Output*:

######

## ##

#

#

#

#

#

## ##

######

**4.** Write a C program to print the following characters in a reverse way.   
*Test Characters*: 'X', 'M', 'L'  
*Expected Output*:  
The reverse of XML is LMX

**5.** Write a C program to compute the perimeter and area of a rectangle with a height of 7 inches. and width of 5 inches.   
*Expected Output*:  
Perimeter of the rectangle = 24 inches  
Area of the rectangle = 35 square inches

**6.** Write a C program to compute the perimeter and area of a circle with a radius of 6 inches.   
*Expected Output*:  
Perimeter of the Circle = 37.680000 inches  
Area of the Circle = 113.040001 square inches

**7.** Write a C program to display multiple variables.   
Sample *Variable*s :  
a+ c, x + c,dx + x, ((int) dx) + ax, a + x, s + b, ax + b, s + c, ax + c, ax + ux  
*Declaration* :  
int a = 125, b = 12345;  
long ax = 1234567890;  
short s = 4043;  
float x = 2.13459;  
double dx = 1.1415927;  
char c = 'W';  
unsigned long ux = 2541567890;

**8.** Write a C program to convert specified days into years, weeks and days.   
Note: Ignore leap year.  
  
Test Data :  
Number of days : 1329  
Expected Output :  
Years: 3  
Weeks: 33  
Days: 3

**9.** Write a C program that accepts two integers from the user and calculate the sum of the two integers.   
Test Data :  
Input the first integer: 25  
Input the second integer: 38  
Expected Output:  
Sum of the above two integers = 63

**10.** Write a C program that accepts two integers from the user and calculate the product of the two integers.   
Test Data :  
Input the first integer: 25  
Input the second integer: 15  
Expected Output:  
Product of the above two integers = 375

**11.** Write a C program that accepts two item’s weight (floating points' values ) and number of purchase (floating points' values) and calculate the average value of the items.   
Test Data :  
Weight - Item1: 15  
No. of item1: 5  
Weight - Item2: 25  
No. of item2: 4  
Expected Output:  
Average Value = 19.444444

**12.** Write a C program that accepts an employee's ID, total worked hours of a month and the amount he received per hour. Print the employee's ID and salary (with two decimal places) of a particular month.   
Test Data :  
Input the Employees ID(Max. 10 chars): 0342  
Input the working hrs: 8  
Salary amount/hr: 15000  
Expected Output:  
Employees ID = 0342  
Salary = U$ 120000.00

**13.** Write a C program that accepts three integers and find the maximum of three.   
Test Data :  
Input the first integer: 25  
Input the second integer: 35  
Input the third integer: 15  
Expected Output:  
Maximum value of three integers: 35

**14.** Write a C program to calculate a bike’s average consumption from the given total distance (integer value) traveled (in km) and spent fuel (in liters, float number – 2 decimal point).   
Test Data :  
Input total distance in km: 350  
Input total fuel spent in liters: 5  
Expected Output:  
Average consumption (km/lt) 70.000

**15.** Write a C program to calculate the distance between the two points.   
Test Data :  
Input x1: 25  
Input y1: 15  
Input x2: 35  
Input y2: 10  
Expected Output:  
Distance between the said points: 11.1803