Programming Fundamentals

Assignment - 02

Instructions:

- It is individual assignment, so try to do it by yourself.
- Assignment should be in zip file named as RollNumber_Name_PF.zip and name of your file should be according to tasks given in this assignment.
- Submit your assignment on google classroom **before** deadline **Tuesday 13 September 2022, 11:59pm**. Late submissions will not be considered.
- Total marks of assignment are 100, 10 each.

Assignment # 01

Task 1. Write a program that displays size of int, float, double, char and bool data types, use **sizeof()** function. (Take help regarding sizeof() function).

Task 2. Write a program that compute area of a rectangle, whose height if 9m and width is 5m. Display its area.

Task 3. Write a program that displays sum, subtractions, multiplication and division of two float numbers. Take any float numbers i.e. float f1 = 5.4, f2 = 7.8;

Task 4. Write reasons for errors in following codes:

- ```
  int number = 10;
  cout << number;
  cout << number2;
  int number2 = 50;
  ```
- ```
  char ch = 'Programming Fundamental ';
  cout << ch ;
  ```

Task 5. Write a program that converts Fahrenheit temperature to Celsius temperature. Initialize a variable with Fahrenheit temperature value i.e float Fahrenheit = 35; And convert it into Celsius temperature.
Hint: Celsius = (Fahrenheit - 32) * 5/9

Sample Output:

Temperature in Fahrenheit: 212 Temperature in Celsius: 100

Task 6. Write a program that swaps value of two integer. Display values before and after swapping.
Hint: Take help from third variable.

Sample Output:

Before Swapping:
Value of no1 = 5
Value of no2 = 10

After Swapping:
Value of no1 = 10
Value of no2 = 5

Task 7. Write a program that stores your name, rollno, age and degree in valid data type variables. And displays in following format:

Hi, my name is ------- having roll number ------- and enrolled in -------. My age is -----

Task 8. Write a program that displays average of three numbers. **Hardcode** values of variables.

Task 9. Write a program in which you store float value in int variable. Explain the output.

Task 10. Suppose an employee gets paid every month and earns 2000 each pay period. In a year the employee gets paid 12 times. Write a program that defines the following variables:

payAmount; this variable will hold the amount of pay the employee earns each pay period.

payPeriods; this variable will hold the number of pay periods in a year.

annualPay; this variable will hold the employee's total annual pay, which will be calculated.

Display the value of annualPay variable.

Hint: Employee's total annual pay can be calculated by multiplying employee's pay amount by number of pay periods in a year.