

PROGRAMMING FUNDAMENTALS (THEORY) [CS-102]

Assignment # 01

Task 1: Make a program of the given algorithm

Temperature Converter

Algorithm:

1. **Declare variables:**
 - celsius (float): To store the temperature in Celsius
 - fahrenheit (float): To store the temperature in Fahrenheit
2. **Assign value to Celsius:**
 - Assign a value to celsius (e.g., 37.0)
3. **Convert Celsius to Fahrenheit:**
 - Calculate fahrenheit using the formula: $\text{fahrenheit} = (\text{celsius} * 9/5) + 32$
4. **Print the result:**
 - Display the converted temperature in Fahrenheit.
5. **End**

Task 2: Make a program of the given algorithm

Area and Perimeter Calculator

Algorithm:

1. **Declare variables:**
 - length (float): To store the length of the rectangle
 - width (float): To store the width of the rectangle
 - area (float): To store the calculated area
 - perimeter (float): To store the calculated perimeter
2. **Assign values to length and width:**
 - Assign values to length and width (e.g., 5.0 and 3.0)
3. **Calculate area and perimeter:**
 - Calculate the area using the formula: $\text{area} = \text{length} * \text{width}$
 - Calculate the perimeter using the formula: $\text{perimeter} = 2 * (\text{length} + \text{width})$
4. **Print the results:**

- Display the calculated area and perimeter.

5. End

Assignment should be submitted on time, late submissions will not be entertained and marked as 0.

Submit the source code (.c) file