

SFWR TECH 3PR3

Introduction to C++

For each of the following problems, be sure to output the results to the console.

1. Create a program that assigns values for variables that hold data for the first name, age, hourly wage, and gender (M or F), of a person, and outputs the data contained in those variables in a format such as the following.

First Name: Jim
Age: 23
Hourly Wage: \$11.75
Gender: M

2. Write a program that converts Celsius temperatures to Fahrenheit temperatures. The formula is

$$F = \frac{9}{5}C + 32$$

F is the Fahrenheit temperature, and C is the Celsius temperature.

3. Create a program that prompts the user for a value representing an angle (θ) in degrees, converts it to radians, and outputs the length (s) of an arc of a circle with a constant radius (r) of 5 cm. Use variables to store the degrees, radians and length of an arc. Define radius as a constant.

Formula: $s = r \theta$ (where angle is in radians)

Note: - Indicate the units for all I/O values required from- or provided to- the user.