

Assignment 1

Part - I (5 points)

Create a program that asks the user for a temperature in Fahrenheit, and then prints the temperature in Celsius. The formula for the conversion is:

$$C = 5.0/9.0 * (F - 32)$$

where C is the temperature in Celsius and F is the temperature in Fahrenheit.

Sample run:

Enter temperature in Fahrenheit: 32

The temperature in Celsius: 0.0

Sample run:

Enter temperature in Fahrenheit: 72

The temperature in Celsius: 22.2222222222

Part - II (5 points)

Create a new program that will ask the user for the information needed to find the area of a trapezoid, and then print the area. The formula for the area of a trapezoid is:

$$A = 1/2 * (x_1 + x_2) * h$$

where A is the area, h is the height, and x_1 and x_2 are the top and bottom base of the trapezoid.

Sample run:

Area of a trapezoid

Enter the height of the trapezoid: 5

Enter the length of the bottom base: 10

Enter the length of the top base: 7

The area is: 42.5