Name your program **hw1.cpp**. Program must be able to compile or you will get at most 1.5 out of 3 points for the assignment.

Write one single complete C++ program to do all three sections below:

**A.** Declare two variables of type char. Assign the character $ to the first variable. Prompt the user to enter a character. Read in the user input and assigns to the second variable. Output the characters stored in both variables.

**B.** Ask a user to enter his/her height in feet and inches. Convert the data to centimeters. (Note: 1 foot = 30.48 cm)

**C.** Write a program that computes the area of Trapezoid. Unknown values should be input by user. The area should be a double.

![Trapezoid Diagram](image)

Sample inputs and output. Notice the input and output values to choose the appropriate type of variable.

**Part A:**
Please enter a character: &
First char is $ and second char is &

**Part B:**
How tall are you (in feet and inches)? 5 11
Your height is 180.34 cm.

**Part C:**
What is the height of the trapezoid? 5.0
What is the base 1 of the trapezoid? 5.0
What is the base 2 of the trapezoid? 4.0
The area of the trapezoid is: 22.5