CSCI-UA.0002 – Class #3
Types, Variables, Operators, and Comments

1. Write out the output of each line in the space provided. If the line results in an error, write “error”.

   1. `print(5 + "5")`  #1.________
   2. `a = "five"
      print("five " + a)`  #2.________
   3. `a = 5
      b = "15"
      print(a + b)`  #3.________
   4. `print(5 + int("5"))`  #4.________
   5. `print(str(5) + int("5"))`  #5.________
   6. `print(15 / 2)`  #6.________
   7. `print(-15 // 2)`  #7.________
   8. `print(15 % 2)`  #8.________
   9. `print(15 ** 2)`  #9.________
   10. `print(5 * 5 + 5)`  #10.________

2. How many parameters (arguments) does the function, `str`, take? What does the function, `str`, do?

3. The function, `input`, returns a value. What is the type of the value that it returns?

4. Here’s a trapezoid: The area of a trapezoid is:

   \[
   A = \frac{(b_1 + b_2) \times h}{2}
   \]

   Write a program that calculates the area of the trapezoid above:
   1. Write a comment in your code that says: “Class #3 Handout”.
   2. Declare 3 variables to represent height, base 1 and base 2. Set them equal to the values in the figure above.
   3. Declare a variable to represent area. Set it equal to an expression that calculates the area using the formula above.
   4. Print out “The area of the trapezoid is [area]”, substituting the part in brackets with the corresponding variable.