CSCI-UA.0002 – User Input, Type Conversion, If Statements

1. Write out the output of each program in the space adjacent to it. If there is an error, indicate that an error will occur and correct the program in place. If there is a prompt for user input, include that in the output that you write out. If there is a prompt for input, assume that the user types in 4.

1. num = input("Please enter a number\n> ")
   new_num = num + 5
   print("Your number plus 5 is " + new_num)

   Please enter a number ... then an error

2. b = True
   print("one")
   if b:
       print("two")
   print("three")

   one
   two
   three

3. b = False
   print("one")
   if b:
       print("two")
   else:
       print("three")
   print("four")

   one
   three
   four

2. What is the output of the following program given the user input below (excluding the initial prompt):

   answer = input('Type on to turn on the light, type off to turn off the light')
   if answer == 'on':
       print('it\'s ON!')
   if answer == 'off':
       print('so dark')
   else:
       print('uh oh! you should have typed on or off!')

   1. If the user types 'off', the output is: so dark
   2. If the user types 'on', the output is: it's ON!
      uh oh! You should have typed on or off!

3. Write a program that asks the user for a color. If the user enters 'puce', the program should write out: “that's my favorite color too!”. For all other input, the program should print out “what a lovely color!”. Example output is below:

   what's your favorite color?
   >puce
   that's my favorite color too!

   what's your favorite color?
   >blue
   what a lovely color!

   color = input("What's your favorite color?\n> ")
   if color == "puce":
       print("That's my favorite color too!")
   else:
       print("What a lovely color!")