

Lab 2 Worksheet

Name (first and last)	NetID

1. Predicting and changing code behavior

For these problems, you should try to figure out the answers **without** writing the code and running the program. Try to figure out what the programs do just by studying the code and remembering the material that we covered in class.

Problem A

What will this program print when the user enters `15` in response to the prompt? Explain why.

```
fav_num = input("What is your favorite number? ")  
  
print("Cool, I like ", fav_num, " as well.")  
print("I also like twice that value:", 2 * fav_num)
```

Problem B

What will this program print when we run it?

```
a = 5  
b = 10  
c = 25  
  
if a + b == c:  
    print ("pink elephant")  
elif a + b < c :  
    print ("alligator")  
else:  
    print ("confused monkey")
```

Problem C

Use the program from problem B. What values of **a** , **b** and **c** would change the output of the program to "confused monkey"?

2. Selling Candy

To make a little bit of money on the side, April decided to buy candy bars in bulk and sell them individually for a profit! She pays \$20.00 per box of 20 candy bars. She sells each candy bar individually for \$2.00.

- How much money will she make (i.e., what is her profit) if she buys two boxes and sells all of the candy bars?

- How much money will she make if she buys two boxes and sells only 30 candy bars?

- How much money will she make if she buys two boxes and sells only 30 candy bars, but she charges \$2.50 per bar.