1. Given a dictionary that maps people's names to their phone numbers (assume it already exists and is named *directory*), do each of the following:

   (a) Print out Jill's phone number, or "Unknown" if it isn't in the dictionary

   (b) Check if Matt and Adam have the same phone number

   (c) Check if any two people share a phone number

   (d) Check if the directory has Henry's phone number. If it doesn't, make his phone number x. If it does, make his entry map to a list of two phone numbers, his current number and x.

2. What is the relationship between a class and an object?

3. In a dictionary, the _____ are unique and the _____ can be anything.

4. Write a function that takes two dictionaries as input and outputs one new dictionary that contains the contents of both of the input dictionaries.

5. Write a function that takes in a dictionary as input and returns the key that corresponds to the maximum value in the dictionary:

6. Write a class that represents a rectangle. Implement a constructor and the *repr* method. Then, choose two more methods that would be helpful to have in your class and implement those also.