Bloomberg STARTUP

Week 9 In-class Exercises

1) **Create a dictionary that stores the following price data: Oreos cost 2.75, Doritos cost 1.25, and Donuts cost 0.80.**

2) **Create a dictionary called me that stores your name, age, and favorite color.**

   a. **Using your dictionary, print your favorite color.**

   b. **Add your favorite number to the dictionary.**

   c. **It's your birthday! Increase your age by 1.**

3) **Create a dictionary called student_grades. Using the names as keys and the grade data in arrays as values, store the following data and then use your dictionary to print out Tobias's and Nico's average grades.**

```
Tobias's grades are 96, 85, and 91.
Nico's grades are 95, 94, and 83.
```

4) **Dictionaries can be used as actual dictionaries! Create a dictionary called english_to_italian that stores colors in both English and Italian.**

```
Red = Rosso
Green = Verde
Black = Nero
Orange = Arancione
Pink = Rosa
Blue = Blu
Yellow = Giallo
```

5) **Using your dictionary from the last question, write a function that asks the user for a color in English and then prints "<COLOR> in Italian is <COLORE>"**

6) **You can check if a key is in a dictionary. Try running the following code, then improve your function from the last question to warn the user if they ask for a color not in the dictionary.**

```
if "brown" in english_to_italian:
    print("I know how to say brown in Italian")
else:
    print("I don't know that one..")
```

7) **You can loop through dictionaries. Try running the following code on your english_to_italian dictionary.**

```
for color in english_to_italian:
    print(color)
    print(english_to_italian[color])
```

8) **Change the loop from the last question to print out "<COLOR> in Italian is <COLORE>" for each color in your dictionary.**

9) **Create a dictionary called contacts. The keys will be names and the values will be more dictionaries! Start with this code:**

```
contacts = {
    "tobias" : {"phone": "999-888-7777",
                "email": "tobias@email.com"}
}
```

   a. **Add an entry for yourself to the contacts dictionary.**

   b. **Use the dictionary to print your phone number and email address.**

   c. **Add another entry to the dictionary WITHOUT changing your original dictionary code (i.e., use the my_dictionary[new_key] = new_value method)**

10) Create a contacts program that lets users store a phone number and email address for their friends and then look up the data later.

a. **Write a function that asks the user for a name, phone number, and email address, and then creates an entry for that user in the contacts dictionary.**

b. **Write a function that asks the user for a name, then prints out the email and phone number for that user, if they are in the contacts dictionary.**

c. **Write a function that prints out the names of all the contacts in the dictionary.**

d. **Write a function that lets users edit the phone number or email address of an existing contact.**

e. **Write a main function that asks users what they want to do, then lets them ADD, EDIT, or VIEW a contact, or VIEW ALL contacts.**

f. **Improve your main function to keep asking users what they want to do until they say QUIT.**