1. Create a list called years\_list, starting with the year of your birth, and each year thereafter until the year of your fifth birthday. For example, if you were born in 1980. the list would be years\_list = [1980, 1981, 1982, 1983, 1984, 1985].

Ans:

# Create a list of years from birth year to fifth birthday

birth\_year = 1995

years\_list = [year for year in range (birth\_year, birth\_year + 5)]

print(years\_list)

2. In which year in years\_list was your third birthday? Remember, you were 0 years of age for your first year.

Ans:

birth\_year = 1995

third\_birthday\_year = birth\_year + 2

print("The year of your third birthday was:", third\_birthday\_year)

3.In the years list, which year were you the oldest?

Ans:

birth\_year = 1995

years\_list = [year for year in range(birth\_year, birth\_year + 5)]

oldest\_year = years\_list[-1]

print("The year you were the oldest was:", oldest\_year)

4. Make a list called things with these three strings as elements: "mozzarella", "cinderella", "salmonella".

Ans:

things = ["mozzarella", "cinderella", "salmonella"]

print(things)

5. Capitalize the element in things that refers to a person and then print the list. Did it change the element in the list?

Ans:

things = ["mozzarella", "cinderella", "salmonella"]

# Capitalize the element referring to a person

things[1] = things[1].capitalize()

# Print the updated list

print(things)

6. Make a surprise list with the elements "Groucho," "Chico," and "Harpo."

Ans:

surprise = ["Groucho", "Chico", "Harpo"]

print(surprise)

7. Lowercase the last element of the surprise list, reverse it, and then capitalize it.

Ans:

surprise = ["Groucho", "Chico", "Harpo"]

# Lowercase the last element

surprise[-1] = surprise[-1].lower()

# Reverse the last element

surprise[-1] = surprise[-1][::-1]

# Capitalize the last element

surprise[-1] = surprise[-1].capitalize()

# Print the updated list

print(surprise)

8. Make an English-to-French dictionary called e2f and print it. Here are your starter words: dog is chien, cat is chat, and walrus is morse.

Ans:

# Create an English-to-French dictionary

e2f = {

'dog': 'chien',

'cat': 'chat',

'walrus': 'morse'

}

# Print the dictionary

print(e2f)

9. Write the French word for walrus in your three-word dictionary e2f.

Ans:

French\_word\_for\_walrus=e2f['walrus']

print(French\_word\_for\_walrus)

10. Make a French-to-English dictionary called f2e from e2f. Use the items method.

# Create a French-to-English dictionary from the e2f dictionary using the items method

f2e = {french: english for english, french in e2f.items()}

# Print the French-to-English dictionary

print(f2e)

11. Print the English version of the French word chien using f2e.

# Print the English version of the French word "chien" using f2e

english\_word\_for\_chien = f2e['chien']

print(english\_word\_for\_chien)

12. Make and print a set of English words from the keys in e2f.

# Create a set of English words from the keys in e2f

english\_words\_set = set(e2f.keys())

# Print the set of English words

print(english\_words\_set)

13. Make a multilevel dictionary called life. Use these strings for the topmost keys: 'animals', 'plants', and 'other'. Make the 'animals' key refer to another dictionary with the keys 'cats', 'octopi', and 'emus'. Make the 'cats' key refer to a list of strings with the values 'Henri', 'Grumpy', and 'Lucy'. Make all the other keys refer to empty dictionaries.

# create teh multilevel deictionay "life"

life = {

'animal':{

'cats':['Henri','Grumpy','Lucy'],

'octopi': {},

'emus':{}

},

'plants':{},

'others':{}

}

#print the multilevel dictionary

print(life)

14. Print the top-level keys of life.

# print the top-leve keys of teh 'life' dictionary

top\_leve\_keys = life.keys()

print(top\_leve\_keys)

15. Print the keys for life['animals'].

# Print the keys for life['animals']

animals\_keys = life['animals'].keys()

print(animals\_keys)

16. Print the values for life['animals']['cats']

# Print the values for life['animals']['cats']

cats\_values = life['animals']['cats']

print(cats\_values)