**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].**

Here's an example code:

birth\_year = 1999

fifth\_birthday = birth\_year + 5

years\_list = []

for year in range(birth\_year, fifth\_birthday+1):

years\_list.append(year)

print(years\_list)

This will output:

[1999, 2000, 2001, 2002, 2003, 2004]

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

Here's a Python code that outputs the year in the years\_list in which the third birthday occurred:

birth\_year = 1999

fifth\_birthday = birth\_year + 5

years\_list = []

for year in range(birth\_year, fifth\_birthday+1):

years\_list.append(year)

third\_birthday = birth\_year + 2

print("Third birthday:", third\_birthday)

This will output: Third birthday: 2001.

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

Here's a Python code that outputs the year in the years\_list in which I was the oldest:

birth\_year = 1999

fifth\_birthday = birth\_year + 5

years\_list = []

for year in range(birth\_year, fifth\_birthday+1):

years\_list.append(year)

oldest\_year = years\_list[-1]

print("Oldest year:", oldest\_year)

This will output: Oldest year: 2004.

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

Here's a Python code that creates a list called things with the three elements: "mozzarella", "cinderella", "salmonella":

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

print(things)

This will output: ['mozzarella', 'cinderella', 'salmonella'].

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

Here's a Python code that capitalizes the element in the things list that refers to a person and then prints the list to show whether it changed the element in the list:

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

# Capitalize the element that refers to a person

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

print("Capitalized list:", things)

This will output: Capitalized list: ['mozzarella', 'Cinderella', 'salmonella']. As you can see, the second element of the list has changed, and now it's capitalized.

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

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

print(surprise)

This will output: ['Groucho', 'Chico', 'Harpo'].

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

Here's a Python code that lowercases the last element of the surprise list, reverses it, and then capitalizes it:

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

# Lowercase the last element, reverse it, and then capitalize it

last\_element = surprise[-1].lower()

last\_element = last\_element[::-1].capitalize()

surprise[-1] = last\_element

print("Modified list:", surprise)

This will output: Modified list: ['Groucho', 'Chico', 'Oprah']. As you can see, the last element of the list has been modified.

**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.**

Here's a Python code that creates an English-to-French dictionary called e2f and prints it:

e2f = {"dog": "chien", "cat": "chat", "walrus": "morse"}

print(e2f)

This will output: {'dog': 'chien', 'cat': 'chat', 'walrus': 'morse'}.

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

Here's a Python code that prints the French word for "walrus" in the e2f dictionary:

e2f = {"dog": "chien", "cat": "chat", "walrus": "morse"}

french\_word = e2f["walrus"]

print("French word for walrus:", french\_word)

This will output: French word for walrus: morse.

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

Here's a Python code that creates a French-to-English dictionary called f2e from the e2f dictionary using the items method:

e2f = {"dog": "chien", "cat": "chat", "walrus": "morse"}

f2e = {}

for english, french in e2f.items():

f2e[french] = english

print(f2e)

This will output: {'chien': 'dog', 'chat': 'cat', 'morse': 'walrus'}. As you can see, the keys and values from e2f have been flipped to create the f2e dictionary.

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

Here's a Python code that prints the English version of the French word "chien" using the f2e dictionary:

f2e = {'chien': 'dog', 'chat': 'cat', 'morse': 'walrus'}

english\_word = f2e['chien']

print("English word for chien:", english\_word)

This will output: English word for chien: dog.

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

Here's a Python code that creates and prints a set of English words from the keys in the e2f dictionary:

e2f = {"dog": "chien", "cat": "chat", "walrus": "morse"}

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

print("English words:", english\_words)

This will output: English words: {'walrus', 'dog', 'cat'}. As you can see, the keys from e2f have been converted into a set, which eliminates any duplicates and has no order.

**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.**

Here's a Python code that creates a multilevel dictionary called life:

life = {

'animals': {

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

'octopi': {},

'emus': {}

},

'plants': {},

'other': {}

}

print(life)

This will output:

{

'animals': {

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

'octopi': {},

'emus': {}

},

'plants': {},

'other': {}

}

**14. Print the top-level keys of life.**

Here's a Python code that prints the top-level keys of the life dictionary:

life = {

'animals': {

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

'octopi': {},

'emus': {}

},

'plants': {},

'other': {}

}

top\_level\_keys = life.keys()

print("Top-level keys:", top\_level\_keys)

This will output: Top-level keys: dict\_keys(['animals', 'plants', 'other']).

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

Here's a Python code that prints the keys for life['animals']:

life = {

'animals': {

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

'octopi': {},

'emus': {}

},

'plants': {},

'other': {}

}

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

print("Animal keys:", animal\_keys)

This will output: Animal keys: dict\_keys(['cats', 'octopi', 'emus']).

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

Here's a Python code that prints the values for life['animals']['cats']:

life = {

'animals': {

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

'octopi': {},

'emus': {}

},

'plants': {},

'other': {}

}

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

print("Cat values:", cat\_values)

This will output: Cat values: ['Henri', 'Grumpy', 'Lucy'].