

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: DOB : 16-Dec-2000
years_list = [2000,2001,2002,2003,2004,2005]
```

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

```
Ans: years_list[2]
```

Output = 2002

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

```
Ans: years_list[-1]
```

Output : 2005

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

```
Ans: things = ['mozzarella','cinderella','salmonella']
Print(things)
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?

Ans: This capitalizes the word, but doesn't change it in the list:

```
things_cap = things.copy()
things_cap[1].capitalize()
```

output:

```
: things_cap = things.copy()
: things_cap[1].capitalize()

: 'Cinderella'

: things_cap

: ['mozzarella', 'cinderella', 'salmonella']
```

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

Ans:

```
surprise = ['Groucho', 'Chico', 'Harpo']  
surprise
```

```
['Groucho', 'Chico', 'Harpo']
```

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

Ans:

```
surprise[-1] = surprise[-1].lower()  
surprise[-1] = surprise[-1][::-1]  
surprise[-1].capitalize()
```

```
'Oprah'
```

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:

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

```
{'dog': 'chien', 'cat': 'chat', 'walrus': 'morse'}
```

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

Ans:

```
e2f['walrus']
```

```
'morse'
```

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

Ans:

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

```
{'chien': 'dog', 'chat': 'cat', 'morse': 'walrus'}
```

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

Ans:

```
f2e['chien']
```

```
'dog'
```

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

Ans:

```
set(e2f.keys())
```

```
{'cat', 'dog', 'walrus'}
```

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.?

Ans:

```
life = {'animals': {'cats': ['Henri', 'Grumpy', 'Lucy'], 'octopi': {}, 'emus': {}}, 'plants': {}, 'other': {}}
life
```

```
{'animals': {'cats': ['Henri', 'Grumpy', 'Lucy'], 'octopi': {}, 'emus': {}},
 'plants': {},
 'other': {}}
```

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

Ans:

```
In [25]: print(life.keys())
dict_keys(['animals', 'plants', 'other'])
```

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

Ans:

```
In [26]: print(life['animals'].keys())
dict_keys(['cats', 'octopi', 'emus'])
```

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

Ans:

```
In [27]: print(life['animals']['cats'])
['Henri', 'Grumpy', 'Lucy']
```

