## **Solutions**

- 1. years\_list = [1995, 1996, 1997, 1998, 1999, 2000]seconds\_per\_hour = 60 \* 60
- 2. If I was born in the year 1995, then my third birthday would have been in the year 1998.
- 3. If we assume that the years\_list starts with the year of my birth and goes up to my fifth birthday, then the year in which I was the oldest would be my fifth birthday year.
- 4. things = ["mozzarella", "cinderella", "salmonella"]
- 5. things = ["mozzarella", "cinderella", "salmonella"] things[1] = things[1].capitalize() print(things)
- 6. surprise = ["Groucho", "Chico", "Harpo"]

```
surprise = ["Groucho", "Chico", "Harpo"]
last_element = surprise[-1]  # get the last element of the list
last_element = last_element.lower()  # convert the string to
lowercase
last_element = last_element[::-1]  # reverse the string
last_element = last_element.capitalize()  # capitalize the first
letter of the string
surprise[-1] = last_element  # assign the modified string back
to the last element of the list
print(surprise)
```

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

```
print(e2f)
```

8.

```
e2f = {
    "dog": "chien",
    "cat": "chat",
    "walrus": "morse"
}
print(e2f)
```

9.

```
e2f = {
    "dog": "chien",
    "cat": "chat",
    "walrus": "morse"
}
french_word = e2f["walrus"]
print(french_word)
```

10.

```
e2f = {
    "dog": "chien",
    "cat": "chat",
    "walrus": "morse"
}
f2e = {french: english for english, french in e2f.items()}
print(f2e)
```

```
e2f = {
    "dog": "chien",
    "cat": "chat",
```

```
"walrus": "morse"
}
f2e = {french: english for english, french in e2f.items()}
english_word = f2e["chien"]
print(english_word)
```

```
e2f = {
    "dog": "chien",
    "cat": "chat",
    "walrus": "morse"
}
english_words = set(e2f.keys())
print(english_words)
```

12.

```
e2f = {
    "dog": "chien",
    "cat": "chat",
    "walrus": "morse"
}
english_words = set(e2f.keys())
print(english_words)
```

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

```
"plants": {},
   "other": {}
}
```

14.

```
life = {
    "animals": {
        "cats": ["Henri", "Grumpy", "Lucy"],
        "octopi": {},
        "emus": {}
    },
    "plants": {},
    "other": {}
}
print(life.keys())
```

```
life = {
    "animals": {
        "cats": ["Henri", "Grumpy", "Lucy"],
        "octopi": {},
        "emus": {}
    },
    "plants": {},
    "other": {}
}
print(life['animals'].keys())
```