Exercise 2.1

In [1]:
```
mystring = "chocolate"
len(mystring)>=6
```

Out[1]:
```
True
```

In [2]:
```
mystring[:3]
```

Out[2]:
```
'cho'
```

In [3]:
```
mystring[-3:]
```

Out[3]:
```
'ate'
```

Exercise 2.2

In [4]:
```
list_my = []
list_my.append('first')
list_my.append('second')
list_my.append('third')
list_my[1]
```

Out[4]:
```
'second'
```

In [5]:
```
list_my = ['first','second','third']
list_my[1]
```

Out[5]:
```
'second'
```

In [18]:
```
list_my2 = ['foo']
```

In [19]:
```
list_my2[1] = 'bar'
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
Cell In[19], line 1
----> 1 list_my2[1] = 'bar'

IndexError: list assignment index out of range
```

Exercise 2.3

In [14]:
```
tuple_my = 1, 2, 3
```

In [15]:
```
tuple_my = (1, 2, 3)
```

In [16]:
```
tuple_my tuple[(1, 2, 3)]
```

```
  Cell In[16], line 1
    tuple_my tuple[(1, 2, 3)]
                   ^
SyntaxError: invalid syntax
```

In [17]:
```
tuple_my.append(4)
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
Cell In[17], line 1
----> 1 tuple_my.append(4)

AttributeError: 'tuple' object has no attribute 'append'
```

In [ ]:
```
#Exercise 2.4
```

In [12]:
```
value = "Error"
decible = {'Warn','Error','Critical'}
```

In [13]:
```
value in decible
```

Out[13]:
```
True
```

In [10]:
```
levels = {'Warn','Error','Critcal','Warn','Error','Critical'}
```

In [11]:
```
levels
```

Out[11]:
```
{'Critcal', 'Critical', 'Error', 'Warn'}
```

In [ ]:
```
#Exercise 2.5
```

In [20]:
```
nombre_age = { "john": 23, "greta" : 17, "jackson": 28 }
```

In [21]:
```
print("nombre_age['john'] =", nombre_age.get('john'))
```

```
nombre_age['john'] = 23
```

In [22]:
```
nombres = list(nombre_age.keys())
```

In [23]:
```
print('nombres:', nombres)
```

```
nombres: ['john', 'greta', 'jackson']
```

In [24]:
```
type(nombre_age.keys()), type(nombres)
```

Out[24]:
```
(dict_keys, list)
```

In [ ]:
```
#Exercise 2.6
```

In [25]:
```
string_my = "The cat in the hat took my food."
```

In [26]:
```
string_my1 = string_my.replace('.', '')
string_my2 = string_my1.lower()
string_my3 = string_my1.split()
string_my3
```

Out[26]:
```
['The', 'cat', 'in', 'the', 'hat', 'took', 'my', 'food']
```

In [27]:
```
my_set1 = set(string_my3)
my_set2 = sorted(my_set1)
my_set2
```

Out[27]:
```
['The', 'cat', 'food', 'hat', 'in', 'my', 'the', 'took']
```

In [28]:
```
sorted(set(string_my.replace('.', '').lower().split()))
```

Out[28]:
```
['cat', 'food', 'hat', 'in', 'my', 'the', 'took']
```

In [ ]:
```
#Exercise 2.7
```

In [29]:
```
my_list = string_my.replace('.', '').lower().split()
my_set = set(my_list)
```

In [30]:
```
len(my_list) == len(my_set)
```

Out[30]:
```
False
```

In [31]:
```
abs(len(my_list) - len(my_set))
```

Out[31]:
```
1
```

In [ ]:
```
#Exercise 2.8
```

In [32]:
```
watashi = 5
ado = "Energy"
ten = 2.3

print(f"watashi {watashi}, ado {ado}, ten {ten}")
```

```
watashi 5, ado Energy, ten 2.3
```

In [ ]:
```
#Exercise 2.9
```

In [33]:
```
var_1 = 2.3
var_2 = 6.9
var_3 = int(var_1 // var_2)
```

In [34]:
```
var_1 // var_2
```

Out[34]:
```
0.0
```

In [35]:
```
var_3
```

Out[35]:
```
0
```

In [36]:
```
quiz = var_3 < 0
```

In [37]:
```
print(quiz)
```

```
False
```

In [ ]:
```
#Exercise 2.10
```

In [40]:
```
story = """
He had a cat, He had a gnat,
\t I had never known that.
\tWhat a story he had told.
\t\tLike a diamond in the sky.
Twinkle, twinkle, little star,
\tHow I wonder what you are!
"""
```

In [41]:
```
print(story)
```

```
He had a cat, He had a gnat,
         I had never known that.
        What a story he had told.
                Like a diamond in the sky.
Twinkle, twinkle, little star,
        How I wonder what you are!
```

In [ ]:
```
#Exercise 2.11
```

In [42]:
```
a = 0.25 + 0.25
b = 0.3 + 0.2
```

In [43]:
```
a == b
```

Out[43]:
```
True
```

In [44]:
```
a, b
```

Out[44]:
```
(0.5, 0.5)
```

In [ ]:
```

```