THINK PYTHON

CHAPTER ONE (24/04/2020)

trazoM's Assignment

Exercise 1-1

1. In a print statement, what happens if you leave out one of the parentheses, or both?

```
"C:\Users\trazoM\PycharmProjects\THINK PYTHON\venv\Scripts\python.exe" "C:\Program Files\JetBrains\PyCharm Com

import sys; print('Python %s on %s' % (sys.version, sys.platform))
sys.path.extend(['C:\\Users\\trazoM\\PycharmProjects\\THINK PYTHON', 'C:/Users/trazoM/PycharmProjects/THINK PY

PyDev console: starting.

Python 3.8.0 (tags/v3.8.0:fa919fd, Oct 14 2019, 19:37:50) [MSC v.1916 64 bit (AMD64)] on win32
>>>
>>>
>>> #leaving parenthesis
>>> print 'I left both parenthesis'
  File "<input>", line 1
    print 'I left both parenthesis'
                ^
SyntaxError: Missing parentheses in call to 'print'. Did you mean print('I left both parenthesis')?
>>> print 'I left the first parenthesis')
  File "<input>", line 1
    print 'I left the first parenthesis')
                ^
SyntaxError: Missing parentheses in call to 'print'. Did you mean print('I left the first parenthesis'))?

>>> print ('I left the second parenthesis'
...
...
...
...        |
```

If you are trying to print a string, what happens if you leave out one of the quotation marks, or both?

```
>>>
>>>
>>> #leaving quotation marks
>>> print (I left both quotation marks)
  File "<input>", line 1
    print (I left both quotation marks)
              ^
SyntaxError: invalid syntax
>>> print (I left the first quotation mark')
  File "<input>", line 1
    print (I left the first quotation mark')
              ^
SyntaxError: invalid syntax

>>> print ('I left the second quotation mark)
...

...

...

...
```

2. You can use a minus sign to make a negative number like -2. What happens if you put a plus sign before a number? What about 2++2?

```
Python 3.8.0 (tags/v3.8.0:fa919fd, Oct 14 2019, 19:37:50) [MSC v.1916 64 bit (AMD64)] on win32
>>>
>>>
>>> 2++2
4
```

3. In math notation, leading zeros are okay, as in 02. What happens if you try this in Python?

```
>>> 02+02
  File "<input>", line 1
SyntaxError: leading zeros in decimal integer literals are not permitted; use an 0o prefix for octal integers

>>>
```

5. What happens if you have two values with no operator between them?

```
>>> 2 2
  File "<input>", line 1
    2 2
      ^
SyntaxError: invalid syntax

>>>
```

Exercise 1-2

1. How many seconds are there in 42 minutes 42 seconds?

```
>>> #How many seconds are there in 42 minutes 42 seconds?
>>> (42*60)+42
2562

>>>
```

2. How many miles are there in 10 kilometers? Hint: there are 1.61 kilometers in a mile.

```
>>> #How many miles are there in 10 kilometers? Hint: there are 1.61 kilometers in a mile.
>>> 10/1.61
6.211180124223602

>>>
```

3. If you run a 10 kilometer race in 42 minutes 42 seconds, what is your average pace (time per mile in minutes and seconds)? What is your average speed in miles per hour?

```
PyDev console: starting.

Python 3.8.0 (tags/v3.8.0:fa919fd, Oct 14 2019, 19:37:50) [MSC v.1916 64 bit (AMD64)] on win32
>>>
>>> '''3. If you run a 10 kilometer race in 42 minutes 42 seconds, what is your average
... pace (time per mile in minutes and seconds)? What is your average speed in miles per hour?'''
'3. If you run a 10 kilometer race in 42 minutes 42 seconds, what is your average \npace (time per mil
>>>
>>> #time per mile in seconds
>>>
>>> ((42*60)+42)/(10/1.61)
412.482
>>> #average speed in miles per hour
>>>
>>> (10/1.61)/((42/60)+(42/(60*60)))
8.727653570337614

>>>
```