Exercise_1_solutions

January 5, 2019

1.

```
In [0]: 7**4
```

```
Out[0]: 2401
```

2.

```
In [1]: s = "Hi there Sam!"
        s_split = s.split()
        s_split[2] = "dad!"
        print(" ".join(s_split))
```

```
Hi there dad!
```

3.

```
In [0]: planet = "Earth"
        diameter = 12742
        print("The dimeter od {} is {} kilometers.".format(planet, diameter))
```

```
The dimeter od Earth is 12742 kilometers.
```

4.

```
In [0]: lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
        print(lst[3][1][2][0])
```

```
hello
```

5.

```
In [0]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
        print(d['k1'][3]['tricky'][3]['target'][3])
```

```
hello
```

6.

```
In [0]: # krotka nie moe by modyfikowana (immutable), inaczej jest w przypadku listy
        t = (1,)
        t[0] = 2
```

```
        ---------------------------------------------------------------------------

        TypeError                                 Traceback (most recent call last)

        <ipython-input-6-cdb7ee61d5c5> in <module>()
          1 t = (1,)
    ----> 2 t[0] = 2


        TypeError: 'tuple' object does not support item assignment
```

7.

```
In [0]: def grab_email(email):
          email_split = email.split('@')
          return email_split[1]

        print(grab_email('super_user@ee.pw.edu.pl'))
```

```
ee.pw.edu.pl
```

8.

```
In [0]: # zrozumiaem, i sowo 'car' zakoczone znakiem interpunkcyjnym jest pomijane
        # trzeba natomiast uwzgldni moliwo wystpowania wielkich liter
        def isCar(input_str):
          return True if 'CAR' in input_str.upper().split() else False

        print(isCar('The statement contains world car'))
        print(isCar('Here it is absent'))
```

```
True
False
```

9.

```
In [0]: # przyjem podobne zaoenia jak w podpunkcie 8
        def countCar(input_str):
          return input_str.upper().split().count('CAR')

        print(countCar('This car runs faster than the other car dude!'))
```

2

10.

```
In [2]: seq = ['soup','dog','salad','cat','great']
        filter_seq = list(filter(lambda s: s[0]=='s', seq))
        print(filter_seq)
```

```
['soup', 'salad']
```

11.

```
In [0]: def caught_speeding(speed, is_birthday):
          if(is_birthday):
            speed -= 5

          if(speed <= 60):
            return "No ticket"
          elif(speed <= 80):
            return "Small ticker"
          else:
            return "Big ticket"

        print(caught_speeding(81,True))
        print(caught_speeding(81,False))
```

```
Small ticker
Big ticket
```