

PYTHON DATA STRUCTURES EXERCISE

Attempt all tasks listed below in one python file (.py). Upload it into your google drive folder along with the course screenshots and submit the link to your google folder.

1. Below are two lists convert it into a dictionary. (using a python

```
keys = ['Ten', 'Twenty', 'Thirty']
```

```
values = [10, 20, 30]
```

2. Access the value of key 'history' from the dictionary below

```
sampleDict = {"class": {  
    "student" : {  
        "name": "Mike",  
        "marks": {  
            "physics": 70,  
            "history": 80 }  
        }  
    }  
}
```

3. Using the dictionary above, add a key value pair (of your choice) to the student dictionary

4. Reverse this list

```
numbers = [100, 200, 300, 400, 500]
```

5. Return a new set of identical items from set1 & set2

```
set1 = {10, 20, 30, 40, 50}
```

```
set2 = {30, 40, 50, 60, 70}
```

6. Check if these two sets have any elements in common. If yes, display the common elements.

```
set1 = {10, 20, 30, 40, 50}
```

```
set3 = {60, 70, 80, 90, 10}
```

7. Correct this sentence

- sentence = "One year has {} months, {} weeks and {} days.".format(52, 365, 12)

8. What is the cube root of 8?

9. Convert this sentence below to a proper sentence case

""Hello from the Other side I must've called a thousand times To tell you I'm sorry for

EVERYTHING that I've done But when I call, You never seem to be Home""

10. In the following list of email addresses, separate users with '@gmail.com' into a separate list

```
['joyfloyd2@hotmail.com', 'jb23forever@yahoo.com',  
'adesade4@gmail.com', 'bimpeadeola@gmail.com',  
'harunaik@yahoo.com', 'chikaoluchi@gmail.com',  
'sweetheart4eva@hotmail.com', 'fionashrek@gmail.com',  
'peace_goodness@hotmail.com']
```