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# Homework for Python List, Set, Dict

## Read a Python book

"Python for kids" is a book for beginners. If you Google "Python for kids, pdf", the book should come out at the top of the search results as a free download pdf file.

[https://doc.lagout.org/programmation/python/Python%20for%20Kids\\_%20A%20Playful%20Introduct12-22\].pdf](https://doc.lagout.org/programmation/python/Python%20for%20Kids_%20A%20Playful%20Introduct12-22].pdf)

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Read the textbook chapters regarding the "List", "Set" and "Dictionary"



## List

Extra reading:

<https://www.programiz.com/python-programming/list> (<https://www.programiz.com/python-programming/list>)

1)

- Create a list of three of your favorite movies
- enumerate all movies (print out the list)
- use 'append' to add a new movie at the end of list, then print out the list.
- pop out the first element of the list, then print out the list.
- reverse the list, then print out the list.

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2)

Write a Python program to display the first and last colors from the following list. Assume you can't count the length of the list by looking at the list.

```
color_list = ["Red", "Green", "White", "Black", "Blue", "Grey", "Orange"]
```

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## Set

3)

Extra reading: <https://www.programiz.com/python-programming/set>  
(<https://www.programiz.com/python-programming/set>)

- create a set of all top 4 fruits that you like, put it in set A
- create another set of top 4 fruits that your dad or mom like, put it in set B
- find and print out what fruits that both you and your parent like
- find and print out what fruits that only you like

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## Dict

4)

Extra Reading: <https://www.programiz.com/python-programming/dictionary>  
(<https://www.programiz.com/python-programming/dictionary>)

- create a dict that contain key-value pairs of {country: capital}, example: {'US': 'Washington DC'}, put at least 5 entries in it
- print all the country names
- print all capitals
- add one entry to the dict
- check if 'China' in your dict keys
- check if 'Shanghai' in your dict values

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## 3 Dictionary to Lists

5)

For the following dictionary:

- change Ethel Smyth's sports to Tennis.
- print all of the keys
- print all of the values

```
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                        'Michael Tippett' : 'Basketball',  
                        'Edward Elgar' : 'Baseball',  
                        'Rebecca Clarke' : 'Netball',  
                        'Ethel Smyth' : 'Badminton',  
                        'Frank Bridge' : 'Rugby'}
```

