pythonLab3

September 29, 2021

```python
import random


# generate a random list of size 100
myList = []

for i in range(100):
    myList.append(random.randint(0,100))


# print sum using in built function
print(sum(myList))

# normal method
summ = 0

for i in myList:
    summ = summ + i

print(summ)
```

```
4597
4597
```

```python
# largest number from the list

# normal method
print(max(myList))

largest = myList[0]

for i in myList:
    if(i > largest):
        largest = i

print(largest)
```

```
100
```

```
tupleList = [('a' , 1) , ('b' , 4) , ('c' , 3)]

# sort list according to last element
sortedList = sorted(tupleList , key=lambda x:x[-1])

print(sortedList)
```

```
[('a', 1), ('c', 3), ('b', 4)]
```

```
# remove duplicates from list

# using sets
mySet = list(set(myList))

print(mySet)


# else
newList = []

for i in myList:
    if(i not in newList):
        newList.append(i)

print(newList)
```

```
[1, 3, 4, 5, 6, 8, 11, 12, 13, 15, 17, 18, 19, 21, 22, 23, 24, 27, 29, 30, 31,
32, 33, 34, 35, 36, 37, 39, 40, 41, 42, 46, 50, 51, 53, 54, 55, 57, 60, 63, 67,
69, 71, 72, 73, 75, 76, 79, 81, 82, 83, 87, 90, 91, 92, 93, 95, 96, 98, 100]
[32, 22, 27, 29, 50, 67, 5, 41, 33, 100, 46, 17, 87, 91, 21, 13, 19, 8, 55, 36,
35, 37, 60, 3, 63, 90, 95, 42, 11, 54, 75, 83, 51, 6, 98, 40, 82, 93, 79, 92,
76, 12, 23, 72, 73, 4, 69, 1, 15, 18, 71, 39, 81, 53, 96, 34, 31, 24, 30, 57]
```

```
wordList = ["hello" , "don" , "john" , "harsh native" , "king" , "oops"]

n = 3

result = []

for i in wordList:
    if(len(i) > n):
        result.append(i)

print(result)
```

```
['hello', 'john', 'harsh native', 'king', 'oops']
```

```python
# difference btw two list


list1 = [1,2,3,4,5,7]
list2 = [2,3,7,8,9]

# using sets
print(list(set(list1) - set(list2)))


# without using sets

result = []

for i in list1:
    if(i not in list2):
        result.append(i)

print(result)
```

```
[1, 4, 5]
[1, 4, 5]
```

```python
myDict = {"one" : 1 , "two" : 2 , "three" : 3}

print(myDict)

# adding key = four
myDict["four"] = 4

print(myDict)
```

```
{'one': 1, 'two': 2, 'three': 3}
{'one': 1, 'two': 2, 'three': 3, 'four': 4}
```

```python
dic1={1:10, 2:20}
dic2={3:30, 4:40}
dic3={5:50,6:60}

dic1.update(dic2)
dic1.update(dic3)

print(dic1)
```

```
{1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}
```

```python
# remove dic1 key - 6

del dic1[6]

print(dic1)
```

{1: 10, 2: 20, 3: 30, 4: 40, 5: 50}

```python
result = 1

for i,j in dic1.items():
    result = result * i * j

print(result)
```

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