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18MXBH - Python Application Programming
(List Practice)

1.Assign a list of even numbers in the range 10 to 50. Print all numbers in the list.

Answer:
Python Code:

```
evenlist = []
for j in range(10,50):
        if(j%2 == 0):
                evenlist.append(j)

print("Even List : ",evenlist)
```

Output:

```
Even List : [10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48]
```

4.Given a list of integers remove duplicate elements in a list.

Answer:
Python Code:

```
lst = []
n = int(input("Enter The Number Of Integers : "))
for i in range(0, n):
        num = input()
        lst.append(num)

dupset=set()
ndup=[]
for i in lst:
        if (i not in dupset):
                ndup.append(i)
                dupset.add(i)

print("List Without Duplicate : ",dup)
```

Output:

```
Enter The Number Of Integers : 4
1
4
1
1
List Without Duplicate : [1, 4]
```

5.Accept a list of fruit names and sort it in ascending order, descending order, length of the fruit name.

Answer:

Python Code:

```
lst = []
n = int(input("Enter The Number Of Fruits : "))
for i in range(0, n):
        chars = input()
        lst.append(chars)

charlist = sorted(lst)

print("Ascending Order : ",charlist)
print("Descending Order : ",sorted(lst,reverse=True))
```

Output:

```
Enter The Number Of Fruits : 4
pineapple
jackfruit
orange
banana
Ascending Order : ['banana', 'jackfruit', 'orange', 'pineapple']
Descending Order : ['pineapple', 'orange', 'jackfruit', 'banana']
```

6.Given two lists of integers find if all the integers in list1 occur in list2

Answer:

Python Code:

```
lst = []
n = int(input("Enter The Number Of Integers In List 1 : "))
for i in range(0, n):
        num = input()
        lst.append(num)

lst1 = []
n1 = int(input("Enter The Number Of Integers in List 2 : "))
for i in range(0, n1):
        num1 = input()
        lst.append(num1)

check = False
for x in lst:
        for y in lst1:
                if(x == y):
                        lst3.append(x)
print("Result")

print("Elements Of List 1 in  List 2 :",lst3)
```

Output:

```
Enter The Number Of Integers In List 1 : 3
4
5
6
Enter The Number Of Integers In List 2 : 3
4
5
6
Result
Elements Of List 1 in  List 2 : [4, 5, 6]
```

10.Given a list of numbers with a range n, write a Python program to find a missing number from the list .

Input : n=8,. [1,2,3,4,6,7,8] , output: : 5

Answer:

Python Code:

```
rlst = [1,2,3,4,6,7,8]
print("Result : ",sorted(set(range(rlst[0], rlst[-1])) - set(rlst)))
```

Output:

Result : [5]

2.Assign two lists: an even list and an odd list of numbers in the range 300 to 400. Add this to list. Replicate the even list five times. In the replicated list find how many times the number 48 occurs. Sort the replicated in ascending and descending order.

Answer:

Python Code:

```
elst = []
s = int(input("Enter Start Of Even Integers : "))
n = int(input("Enter End Of Even Integers : "))
for i in range(s,n):
        if(i%2 == 0):
                elst.append(i)

olst = []
s1 = int(input("Enter Start Of Odd Integers : "))
n1 = int(input("Enter End Of Odd Integers : "))
for i in range(s1,n1):
        if(i%2 != 0):
                olst.append(i)
lst=[]
lst.extend(elst)
lst.extend(olst)
print("Ascending Order : ",relst)
print("Descending Order : ",sorted(relst,reverse=True))
```

Output:

```
Enter Start Of Even Integers : 300
Enter End Of Even Integers : 400
Enter Start Of Odd Integers : 300
```

Enter End Of Odd Integers : 400
Ascending Order : [300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398]
Descending Order : [398, 398, 398, 398, 398, 396, 396, 396, 396, 396, 394, 394, 394, 394, 394, 392, 392, 392, 392, 392, 390, 390, 390, 390, 390, 388, 388, 388, 388, 388, 386, 386, 386, 386, 386, 384, 384, 384, 384, 384, 382, 382, 382, 382, 382, 380, 380, 380, 380, 380, 378, 378, 378, 378, 378, 376, 376, 376, 376, 376, 374, 374, 374, 374, 374, 372, 372, 372, 372, 372, 370, 370, 370, 370, 370, 368, 368, 368, 368, 368, 366, 366, 366, 366, 366, 364, 364, 364, 364, 364, 362, 362, 362, 362, 362, 360, 360, 360, 360, 360, 358, 358, 358, 358, 358, 356, 356, 356, 356, 356, 354, 354, 354, 354, 354, 352, 352, 352, 352, 352, 350, 350, 350, 350, 350, 348, 348, 348, 348, 348, 346, 346, 346, 346, 346, 344, 344, 344, 344, 344, 342, 342, 342, 342, 342, 340, 340, 340, 340, 340, 338, 338, 338, 338, 338, 336, 336, 336, 336, 336, 334, 334, 334, 334, 334, 332, 332, 332, 332, 332, 330, 330, 330, 330, 330, 328, 328, 328, 328, 328, 326, 326, 326, 326, 326, 324, 324, 324, 324, 324, 322, 322, 322, 322, 322, 320, 320, 320, 320, 320, 318, 318, 318, 318, 318, 316, 316, 316, 316, 316, 314, 314, 314, 314, 314, 312, 312, 312, 312, 312, 310, 310, 310, 310, 310, 308, 308, 308, 308, 308, 306, 306, 306, 306, 306, 304, 304, 304, 304, 304, 302, 302, 302, 302, 302, 300, 300, 300, 300, 300]