

## ASSIGNMENT 2 – Lists in Python

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A5. Write a Python Program to find the union of two lists.

Sample Input:

lst1=[10,20,30,40,30,50,60]

lst2=[10,15,20,30,25,25]

**Output:**

lst3=[10,20,30,40,50,60,15,25] # or in any other order

```
# Write a Python Program to find the union of two lists.

lst1 = [10,20,30,40,30,50,60]
lst2 = [10,15,20,30,25,25]
lstU = list(set(lst1) | set(lst2))
print(lstU)
```

A6. Write a program to create, append, and remove lists in python

```
# Write a program to create, append, and remove lists in python

# create
list = []

# append
def append(v):
    return list.append(v)

# remove
def remove(v):
```

```

        return list.remove(v)

while(True):
    choise = int(input("Press 1 for Append, Press 2
for remove, Press 0 to exit\n"))
    if choise == 1:
        v = int(input("Enter value to be added: "))
        append(v)
        print(list)
    elif choise == 2:
        v = int(input("Enter the element to be
removed: "))
        remove(v)
        print(list)
    elif choise == 0:
        exit()
    else:
        print("Try with valid input next time!")

```

A7. Python program to square each element of a list.

Given x = [2, 3, 4, 5, 6]

#### **Expected output**

Result : 4 9 16 25 36

```

# Python program to square each element of a list.

lst = [1,2,3,4,5,6]
sqr = []

for i in lst:
    sqr.append(i*i)

print(sqr)

```

A8. Python program to remove an empty element from a list.

```
num = ["Hello", 34, 45, "", 40]
```

Expected output

Result : ['Hello', 34, 45, 40]

```
# Python program to remove an empty element from a list.

num = ["Hello", 34, 45, "", 40, ""]
for i in num:
    if i == "":
        num.remove("")

print(num)
```

A9. Write a program to get the maximum number from a list.

**Hint**

Given num = [2,3,2,4,7,8]

**Expected output**

Max number in list items is 8

```
# Write a program to get the maximum number from a list.

num = [2,3,2,4,7,8]

num.sort()

print("Max number in list items is", num[-1])
```

A10. Write a program in Python to remove duplicate items from a list.

### Hint

Given num = [2,3,4,5,2,6,3,2]

### Expected output

Result: [2, 3, 4, 5, 6]

```
# Write a program in Python to remove duplicate items
from a list.

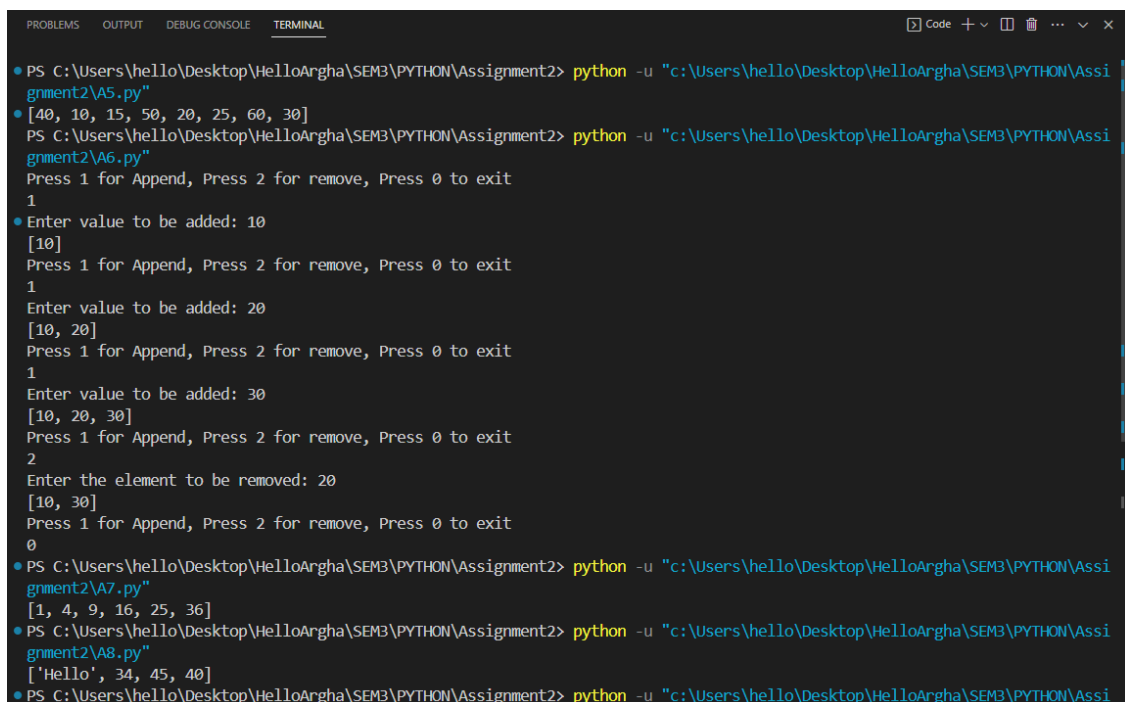
num = [2,3,4,5,2,6,3,2]

new_num = []

for i in num:
    if i not in new_num:
        new_num.append(i)

print(new_num)
```

### OUTPUTS



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2> python -u "c:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2\A5.py"
[40, 10, 15, 50, 20, 25, 60, 30]
PS C:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2> python -u "c:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2\A6.py"
Press 1 for Append, Press 2 for remove, Press 0 to exit
1
Enter value to be added: 10
[10]
Press 1 for Append, Press 2 for remove, Press 0 to exit
1
Enter value to be added: 20
[10, 20]
Press 1 for Append, Press 2 for remove, Press 0 to exit
1
Enter value to be added: 30
[10, 20, 30]
Press 1 for Append, Press 2 for remove, Press 0 to exit
2
Enter the element to be removed: 20
[10, 30]
Press 1 for Append, Press 2 for remove, Press 0 to exit
0
PS C:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2> python -u "c:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2\A7.py"
[1, 4, 9, 16, 25, 36]
PS C:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2> python -u "c:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2\A8.py"
['Hello', 34, 45, 40]
PS C:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2> python -u "c:\Users\hello\Desktop\HelloArgha\SEM3\PYTHON\Assignment2\A9.py"
[2, 3, 4, 5, 6]
```