

IT Workshop Assignment 3 :

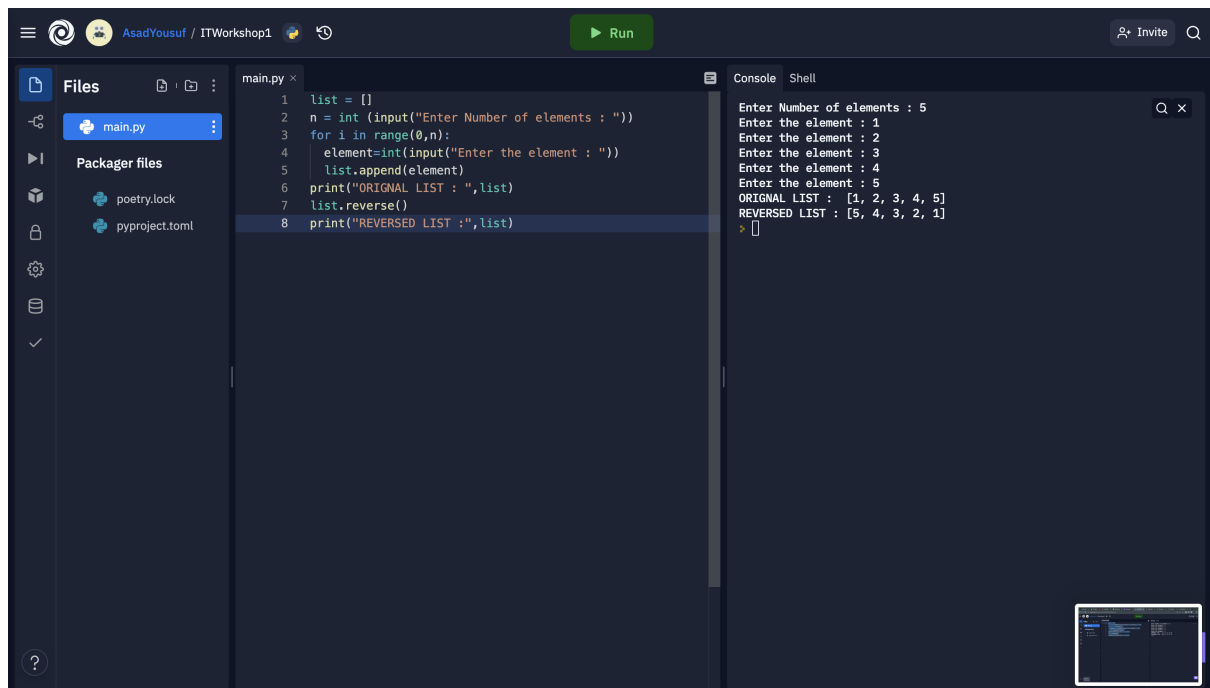
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Section : E(IT)

Reverse a list :

```
list = []
n = int (input("Enter Number of elements : "))
for i in range(0,n):
    element=int(input("Enter the element : "))
    list.append(element)
print("ORIGINAL LIST : ",list)
list.reverse()
print("REVERSED LIST :",list)
```

A screenshot of a code editor interface. The left sidebar shows a file explorer with 'main.py' selected. The main editor area displays the Python code for reversing a list. The right sidebar shows the console output, which matches the code's execution: it prompts for the number of elements (5), then for each element (1, 2, 3, 4, 5), prints the original list [1, 2, 3, 4, 5], reverses it, and prints the reversed list [5, 4, 3, 2, 1].

```
1 list = []
2 n = int (input("Enter Number of elements : "))
3 for i in range(0,n):
4     element=int(input("Enter the element : "))
5     list.append(element)
6 print("ORIGINAL LIST : ",list)
7 list.reverse()
8 print("REVERSED LIST :",list)
```

Enter Number of elements : 5
Enter the element : 1
Enter the element : 2
Enter the element : 3
Enter the element : 4
Enter the element : 5
ORIGINAL LIST : [1, 2, 3, 4, 5]
REVERSED LIST : [5, 4, 3, 2, 1]
> []

Question 1

```
list1=[]
list2=[]
n=int(input("Enter the no of elements : "))
i=0
```

```

while i<n:
    element1 = (input("Enter the string for list 1 : "))
    element2 = (input("Enter the string for list 2 : "))
    list1.append(element1)
    list2.append(element2)
    i+=1
print(list1)
print(list2)
print("Final List after concatenation : ")
list3=[]
i=0;
while i<n:
    element3=list1[i]+list2[i]
    list3.append(element3)
    i+=1
print(list3)

```

```

main.py x
1 list1=[]
2 list2=[]
3 n=int(input("Enter the no of elements : "))
4 i=0
5 while i<n:
6     element1 = (input("Enter the string for list 1 : "))
7     element2 = (input("Enter the string for list 2 : "))
8     list1.append(element1)
9     list2.append(element2)
10    i+=1
11    print(list1)
12    print(list2)
13    print("Final List after concatenation : ")
14    list3=[]
15    i=0;
16    while i<n:
17        element3=list1[i]+list2[i]
18        list3.append(element3)
19        i+=1
20    print(list3)
21
22

```

Console

```

Enter the no of elements : 4
Enter the string for list 1 : M
Enter the string for list 2 : y
Enter the string for list 1 : Na
Enter the string for list 2 : me
Enter the string for list 1 : i
Enter the string for list 2 : s
Enter the string for list 1 : As
Enter the string for list 2 : ad
['M', 'Na', 'i', 'As']
['y', 'me', 's', 'ad']
Final List after concatenation :
['My', 'Name', 'is', 'Asad']
>

```

Question 2

```

list = []
n = int(input("Enter the number of elements : "))
i=0
while i<n:
    element = int(input("Enter the element of the list : "))
    list.append(element)
    i+=1
print("List before squaring : ",list)
list2=[]
i=0
while i < n:
    temp=list[i]*list[i]

```

```
list2.append(temp)
i+=1
print("List after squaring : ",list2)
```

The screenshot shows a code editor with a file named `main.py`. The code in the editor is as follows:

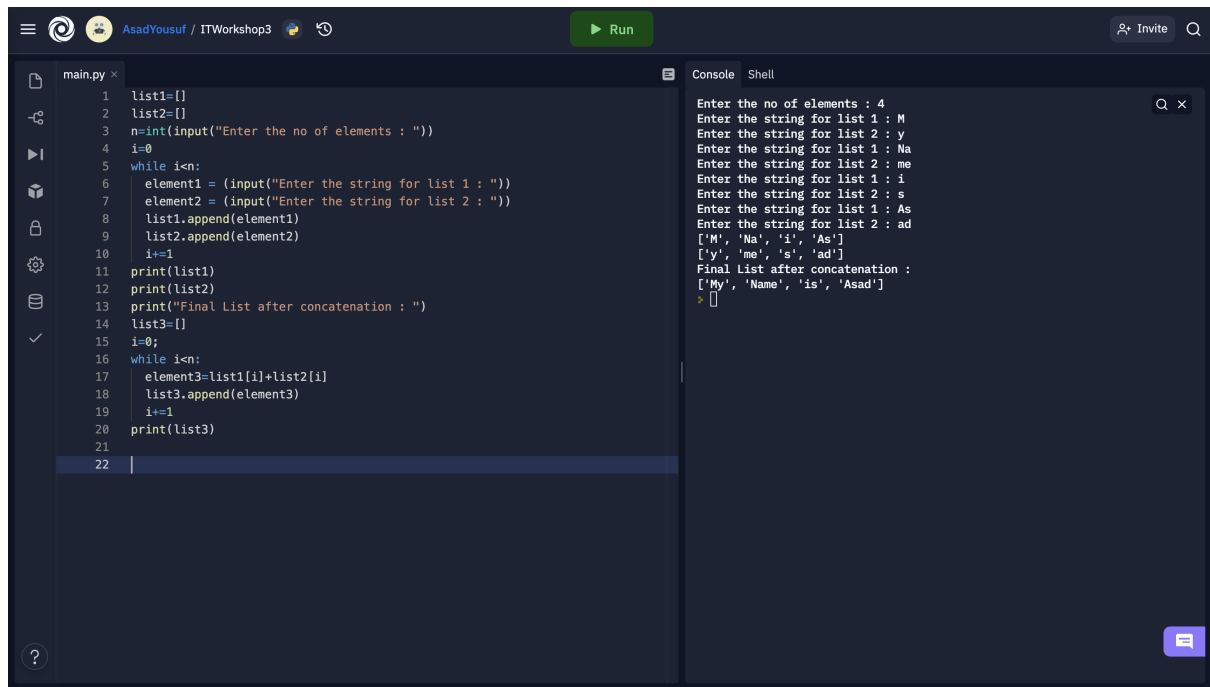
```
1 list = []
2 n = int(input("Enter the number of elements : "))
3 i=0
4 while i<n:
5     element = int(input("Enter the element of the list : "))
6     list.append(element)
7     i+=1
8 print("List before squaring : ",list)
9 list2=[]
10 i=0
11 while i < n:
12     temp=list[i]*list[i]
13     list2.append(temp)
14     i+=1
15 print("List after squaring : ",list2)
```

The console output shows the following interaction:

```
Enter the number of elements : 3
Enter the element of the list : 1
Enter the element of the list : 2
Enter the element of the list : 3
List before squaring : [1, 2, 3]
List after squaring : [1, 4, 9]
```

Question 3

```
list1=[]
list2=[]
n=int(input("Enter the no of elements : "))
i=0
while i<n:
    element1 = (input("Enter the string for list 1 : "))
    element2 = (input("Enter the string for list 2 : "))
    list1.append(element1)
    list2.append(element2)
    i+=1
print(list1)
print(list2)
print("Final List after concatenation : ")
list3=[]
i=0;
while i<n:
    element3=list1[i]+" "+list2[i]
    print(element3)
    i+=1
```



The screenshot shows a code editor with a file named `main.py`. The code defines two lists, `list1` and `list2`, and takes user input for the number of elements `n`. It then uses a `while` loop to append strings to both lists. After printing the individual lists, it concatenates them into a new list `list3` and prints it. The console output shows the user entering 4 elements and the strings 'M', 'y', 'Na', 'me', 'i', 's', 'As', 'ad', resulting in the final list `['M', 'Name', 'is', 'Asad']`.

```
1 list1=[]
2 list2=[]
3 n=int(input("Enter the no of elements : "))
4 i=0
5 while i<n:
6     element1 = (input("Enter the string for list 1 : "))
7     element2 = (input("Enter the string for list 2 : "))
8     list1.append(element1)
9     list2.append(element2)
10    i+=1
11    print(list1)
12    print(list2)
13    print("Final List after concatenation : ")
14    list3=[]
15    i=0;
16    while i<n:
17        element3=list1[i]+list2[i]
18        list3.append(element3)
19        i+=1
20    print(list3)
21
22
```

Console Output:

```
Enter the no of elements : 4
Enter the string for list 1 : M
Enter the string for list 2 : y
Enter the string for list 1 : Na
Enter the string for list 2 : me
Enter the string for list 1 : i
Enter the string for list 2 : s
Enter the string for list 1 : As
Enter the string for list 2 : ad
['M', 'Na', 'i', 'As']
['y', 'me', 's', 'ad']
Final List after concatenation :
['My', 'Name', 'is', 'Asad']
>
```

Question 4

```
list1=[]
list2=[]
n=int(input("Enter the no of elements : "))
i=0
while i<n:
    element1 = (input("Enter the string for list 1 : "))
    element2 = (input("Enter the string for list 2 : "))
    list1.append(element1)
    list2.append(element2)
    i+=1
print(list1)
print(list2)
i=0
while i < n:
    print(list1[i], " ", list2[n-i-1])
    i+=1
```

The screenshot shows a code editor with a file named `main.py` open. The code in the editor is as follows:

```
1 list1=[]
2 list2=[]
3 n=int(input("Enter the no of elements : "))
4 i=0
5 while i<n:
6     element1 = (input("Enter the string for list 1 : "))
7     element2 = (input("Enter the string for list 2 : "))
8     list1.append(element1)
9     list2.append(element2)
10    i+=1
11 print(list1)
12 print(list2)
13 i=0
14 while i < n:
15     print(list1[i]," ",list2[n-i-1])
16     i+=1
17
```

The right-hand pane shows the console output of the program:

```
Enter the no of elements : 4
Enter the string for list 1 : 1
Enter the string for list 2 : 100
Enter the string for list 1 : 2
Enter the string for list 2 : 100
Enter the string for list 1 : 3
Enter the string for list 2 : 300
Enter the string for list 1 : 4
Enter the string for list 2 : 400
['1', '2', '3', '4']
['100', '100', '300', '400']
1 400
2 300
3 100
4 100
>
```

Question 5

```
list=[]
n =int(input("Enter the no of elements : "))
i=0
while i<n:
    element=input("Enter the string : ")
    list.append(element)
    i+=1
i=0
print("Original List : ",list)
while (" " in list):
    list.remove(" ")
print("Modified List : ",list)
```

