

1- Write a program to access the third element from the given list. Input: [10, 20, 30, 40, 50]

```
#Access the third element from the given list
l=[10, 20, 30, 40, 50]
l[2]

30
```

2 Write a program to access the last element from the given list using negative indexing. Input: ['apple', 'banana', 'cherry', 'date'] Output: date

```
l=['apple', 'banana', 'cherry', 'date']
l[-1]

'date'
```

3 Write a program to change the second element to 100 in the given list. Input: [5, 10, 15, 20, 25] Output: [5, 100, 15, 20, 25]

```
l=[5, 10, 15, 20, 25]
l[1]=100
print(l)

[5, 100, 15, 20, 25]
```

4 Write a program to access the first element using negative indexing. Input: [7, 14, 21, 28, 35] Output: 7

```
l=[7, 14, 21, 28, 35]
l[-5]

7
```

5 Write a program to access the second last element from the given list. Input: [1, 2, 3, 4, 5, 6] Output: 5

```
l=[1, 2, 3, 4, 5, 6]
l[-2]

5
```

✓ Slicing in Python

6 Write a program to extract the first three elements from the given list. Input: [100, 200, 300, 400, 500, 600] Output: [100, 200, 300]

```
l=[100, 200, 300, 400, 500, 600]
l[0:3]

[100, 200, 300]
```

7 Write a program to extract all elements except the first two from the given list. Input: [2, 4, 6, 8, 10, 12] Output: [6, 8, 10, 12]

```
l= [2, 4, 6, 8, 10, 12]
l[2:]

[6, 8, 10, 12]
```

8 Write a program to extract every alternate element from the given list. Input: [5, 10, 15, 20, 25, 30, 35] Output: [5, 15, 25, 35]

```
l=[5, 10, 15, 20, 25, 30, 35]
result=l[::2]
print(result)

[5, 15, 25, 35]
```

9 Write a program to reverse the given list using slicing. Input: [1, 3, 5, 7, 9] Output: [9, 7, 5, 3, 1]

```
l=[1, 3, 5, 7, 9]
result=l[::-1]
print(result)
```

```
[9, 7, 5, 3, 1]
```

10 Write a program to extract elements from index 2 to 5 from the given list. Input: [11, 22, 33, 44, 55, 66, 77] Output: [33, 44, 55, 66]

```
l=[11, 22, 33, 44, 55, 66, 77]
result=l[2:6]
print(result)
```

```
[33, 44, 55, 66]
```

11 Write a program to remove the first occurrence of "apple" from the given list. Input: ["banana", "apple", "cherry", "apple"] Output: ["banana", "cherry", "apple"]

```
l=["banana", "apple", "cherry", "apple"]
result=l[:1]
print(result)
```

```
['banana', 'apple', 'cherry']
```

12 Write a program to extract the last element from the last nested list. Input: [['a', 'b', 'c'], ['d', 'e', 'f'], ['g', 'h', 'i']] Output: i

```
l[['a', 'b', 'c'], ['d', 'e', 'f'], ['g', 'h', 'i']]
l[-1][-1]
```

```
'i'
```

✓ Index() Fucntion in Python

13 Write a program to extract the second and third lists from a given nested list. Input: [[10, 20], [30, 40], [50, 60], [70, 80]] Output: [[30, 40], [50, 60]]

```
l=[[10, 20], [30, 40], [50, 60], [70, 80]]
l[1:-1]
```

```
[[30, 40], [50, 60]]
```

14 Write a program to find the index of "cherry" in the given list. Input: ["apple", "banana", "cherry", "date"] Output: 2

```
l=["apple", "banana", "cherry", "date"]
l.index("cherry")
```

```
2
```

15 Write a program to find the index of the number 100 in the given list. If not found, print "Not found". Input: [10, 20, 30, 40] Output: "Not found"

```
l=[10, 20, 30, 40]
if 100 not in l:
    print("Not Found")
else:
    print("Found")
```

```
Not Found
```

✓ Count() fuction

16 Write a program to count the occurrences of 5 in the given list. Input: [1, 5, 2, 5, 3, 5, 4] Output: 3

```
l=[1, 5, 2, 5, 3, 5, 4]
l.count(5)
```

3

17 Write a program to count how many times "apple" appears in the given list. Input: ["apple", "banana", "apple", "cherry", "apple"] Output: 3

```
l=["apple", "banana", "apple", "cherry", "apple"]
l.count("apple")
```

3

18 Write a program to count the occurrences of 100 in the given list. Input: [10, 20, 30, 40, 50] Output: 0

```
l=[10, 20, 30, 40, 50]
l.count(100)
```

0

✓ min() max() function

19 Write a program to find the minimum value in the given list. Input: [45, 12, 78, 34, 23] Output: 12

```
l=[45, 12, 78, 34, 23]
min(l)
```

12

20 Write a program to find the maximum value in the given list. Input: [99, 55, 73, 21, 64] Output: 99

```
l=[99, 55, 73, 21, 64]
max(l)
```

99