

Task1:

```
"""
```

```
["apple", "banana", "cherry"]
```

1. ["apple", "banana", "cherry", "orange"]
2. ["apple", "mango", "banana", "cherry", "orange"]
3. ["apple", "mango", "banana", "cherry", "orange", "kiwi", "grape"]

```
"""
```

```
fruits = ["apple", "banana", "cherry"]
```

```
fruits.append("orange")
```

```
print(fruits)
```

```
fruits.insert(1, "mango")
```

```
print(fruits)
```

```
fruits.extend(["kiwi", "grape"])
```

```
print(fruits)
```

Output:

```
PS D:\Internship\Day3> python task1.py
['apple', 'banana', 'cherry', 'orange']
['apple', 'mango', 'banana', 'cherry', 'orange']
['apple', 'mango', 'banana', 'cherry', 'orange', 'kiwi', 'grape']
```

Task2:

```
"""
```

```
[10,20,30,40,50]
```

1. [10,20,300,40,50]
2. [10,200,3000,400,50]

```
"""
```

```
nums = [10, 20, 30, 40, 50]
```

```
nums[2] = 300
```

```
print(nums)
```

```
nums[1:4] = [200, 3000, 400]
```

```
print(nums)
```

Output:

```
PS D:\Internship\Day3> python task2.py
[10, 20, 300, 40, 50]
[10, 200, 3000, 400, 50]
```

Task3:

```
"""
```

```
[1,2,3]
```

```
1. [1,100,2,3]
```

```
2. [1,100,2,999]
```

```
"""
```

```
lst = [1, 2, 3]
```

```
lst.insert(1, 100)
```

```
print(lst)
```

```
lst.append(999)
```

```
print(lst)
```

Output:

```
PS D:\Internship\Day3> python task3.py
[1, 100, 2, 3]
[1, 100, 2, 3, 999]
```

Task4:

```
"""
```

```
[10,20,30,40,50]
```

```
1. [10,20,30,40,50,60]
```

```
2. [5,10,20,30,40,50,60]
```

```
3. [5,10,20,30,40,50,60,70,80,90]
```

```
"""
```

```
lst = [10, 20, 30, 40, 50]
```

```
lst.append(60)
```

```
print(lst)
```

```
lst.insert(0, 5)
```

```
print(lst)
```

```
lst.extend([70, 80, 90])
```

```
print(lst)
```

Output:

```
PS D:\Internship\Day3> python task4.py
[10, 20, 30, 40, 50, 60]
[5, 10, 20, 30, 40, 50, 60]
[5, 10, 20, 30, 40, 50, 60, 70, 80, 90]
```

Task5:

```
"""
```

```
[42,3.14,"Hello",True]
```

```
1. [2.718,3.14,"Hello",True]
```

```
2. [2.718,3.14,"Hello",True,1000]
```

```
3. [2.718,False,3.14,"Hello",True,1000]
```

```
4. [5,3.14,"Hello",True,1000]
```

```
"""
```

```
lst = [42, 3.14, "Hello", True]
```

```
lst[0] = 2.718
```

```
print(lst)
```

```
lst.append(1000)
```

```
print(lst)
```

```
lst.insert(1, False)
```

```
print(lst)
```

```
lst[0] = 5
```

```
del lst[1]
```

```
print(lst)
```

Output:

```
PS D:\Internship\Day3> python task5.py
[2.718, 3.14, 'Hello', True]
[2.718, 3.14, 'Hello', True, 1000]
[2.718, False, 3.14, 'Hello', True, 1000]
[5, 3.14, 'Hello', True, 1000]
```

Task6:

```
"""
```

```
["Cat", "Dog", "Lion", "Tiger", "Rabbit", "Monkey"]
```

```
1) ["lion"]
```

```
2) ["Monkey", "Rabbit"]
```

```
3) ["Tiger", "Lion", "Dog"]
```

```
4) ["Cat", "Tiger"]
```

```
5) ["Tiger", "Cat"]
```

```
6) ["Monkey", "Lion"]
```

```
7) ["Rabbit", "Lion", "Cat"]
```

```
8) ["Monkey", "Rabbit", "Tiger", "Lion", "Dog", "Cat"]
```

```
"""
```

```
animals = ["Cat", "Dog", "Lion", "Tiger", "Rabbit", "Monkey"]
```

```
print(animals[2:3])
```

```
print(animals[-1:-3:-1])
```

```
print(animals[3:0:-1])
```

```
print(animals[:3])
```

```
print(animals[3::-3])
```

```
print(animals[-1:-5:-3])
```

```
print(animals[4::-2])
```

```
print(animals[::-1])
```

Output:

```
PS D:\Internship\Day3> python task6.py
['Lion']
['Monkey', 'Rabbit']
['Tiger', 'Lion', 'Dog']
['Cat', 'Tiger']
['Tiger', 'Cat']
['Monkey', 'Lion']
['Rabbit', 'Lion', 'Cat']
['Monkey', 'Rabbit', 'Tiger', 'Lion', 'Dog', 'Cat']
```

Task7:

```
"""
```

```
l1=[50, "apple", True, "car", 40.5]
```

1) Find length of l1

2) replace True with False

3) [50, "kiwi", "boat", 20, "car", 40.5]

4) [5000, "kiwi", "boat", 20, "car", 40.5]

5) ["kiwi", "boat", 20, "car", 40.5] using remove()

6) ["kiwi", 20, "car", 40.5] using pop()

7) ["kiwi", 20, "car"] using del

8) ["kiwi", 20, "car", 100]

9) ["banana", "kiwi", 20, "car", 100]

10) ["banana", "kiwi", 20, 30.5, "car", 100]

11) []

```
"""
```

```
l1 = [50, "apple", True, "car", 40.5]
```

```
print(len(l1))
```

```
l1[2] = False
```

```
print(l1)
```

```
l1[1:3] = ["kiwi", "boat", 20]
```

```
print(l1)
```

```
l1[0] = 5000
```

```
print(l1)
```

```
l1.remove(5000)
```

```
print(l1)
```

```
l1.pop(1)
```

```
print(l1)
```

```
del l1[-1]
```

```
print(l1)
```

```
l1.append(100)
```

```
print(l1)
```

```
l1.insert(0, "banana")
```

```
print(l1)
```

```
l1.insert(3, 30.5)
```

```
print(l1)
```

```
l1.clear()
```

```
print(l1)
```

Output:

```
PS D:\Internship\Day3> python task7.py
5
[50, 'apple', False, 'car', 40.5]
[50, 'kiwi', 'boat', 20, 'car', 40.5]
[5000, 'kiwi', 'boat', 20, 'car', 40.5]
['kiwi', 'boat', 20, 'car', 40.5]
['kiwi', 20, 'car', 40.5]
['kiwi', 20, 'car']
['kiwi', 20, 'car', 100]
['banana', 'kiwi', 20, 'car', 100]
['banana', 'kiwi', 20, 30.5, 'car', 100]
[]
```

Task8:

```
"""
```

```
l2=[50, -1, 2, 100, -6, -3, 67, 79, -55]
```

1) reverse the list

2) sort in ascending order

3) sort in descending order

```
"""
```

```
l2 = [50, -1, 2, 100, -6, -3, 67, 79, -55]
```

```
l2.reverse()
```

```
print(l2)
```

```
l2.sort()
```

```
print(l2)
```

```
l2.sort(reverse=True)
```

```
print(l2)
```

Output:

```
PS D:\Internship\Day3> python task8.py
[-55, 79, 67, -3, -6, 100, 2, -1, 50]
[-55, -6, -3, -1, 2, 50, 67, 79, 100]
[100, 79, 67, 50, 2, -1, -3, -6, -55]
```