1. ["apple", "banana", "cherry"]

1. ["apple", "banana", "cherry", "orange"]

2. ["apple", "mango", "banana", "cherry", "orange"]

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

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


fruits.append("orange")

print(fruits)

fruits.insert(1, "mango")

print(fruits)

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

print(fruits)
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.py"
['apple', 'banana', 'cherry', 'orange']
['apple', 'mango', 'banana', 'cherry', 'orange']
['apple', 'mango', 'banana', 'cherry', 'orange', 'kiwi', 'grape']
PS C:\Users\adnan>
```

2. [10,20,30,40,50]

1. [10,20,300,40,50]

2. [10,200,3000,400,50]

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


nums[2] = 300

print(nums)


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

print(nums)

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.py"
[10, 20, 300, 40, 50]
[10, 200, 3000, 400, 50]
PS C:\Users\adnan>
```

3. [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)

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\tempCodeRunnerFile.py"
[1, 100, 2, 3]
[1, 100, 2, 3, 999]
PS C:\Users\adnan>
```

4. [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]

list2 = [10, 20, 30, 40, 50]
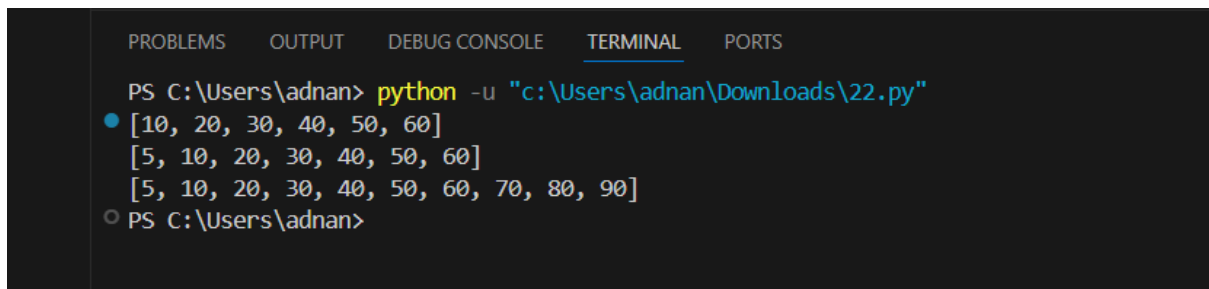
```python
list2.append(60)

print(list2)


list2.insert(0, 5)

print(list2)


list2.extend([70, 80, 90])

print(list2)
```



```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.py"
[10, 20, 30, 40, 50, 60]
[5, 10, 20, 30, 40, 50, 60]
[5, 10, 20, 30, 40, 50, 60, 70, 80, 90]
PS C:\Users\adnan>
```

5. [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]


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


lst[0] = 2.718

print(lst)

lst.append(1000)

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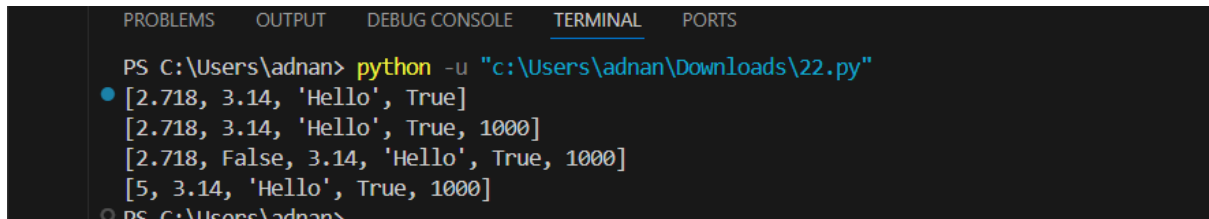
```
lst.insert(1, False)

print(lst)

lst[0] = 5

del lst[1]

print(lst)
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.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]
PS C:\Users\adnan>
```

6. ["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"]

animallist = ["Cat", "Dog", "Lion", "Tiger", "Rabbit", "Monkey"]

print(animallist[2:3])

print(animallist[-1:-3:-1])

print(animallist[3:0:-1])

print(animallist[::3])
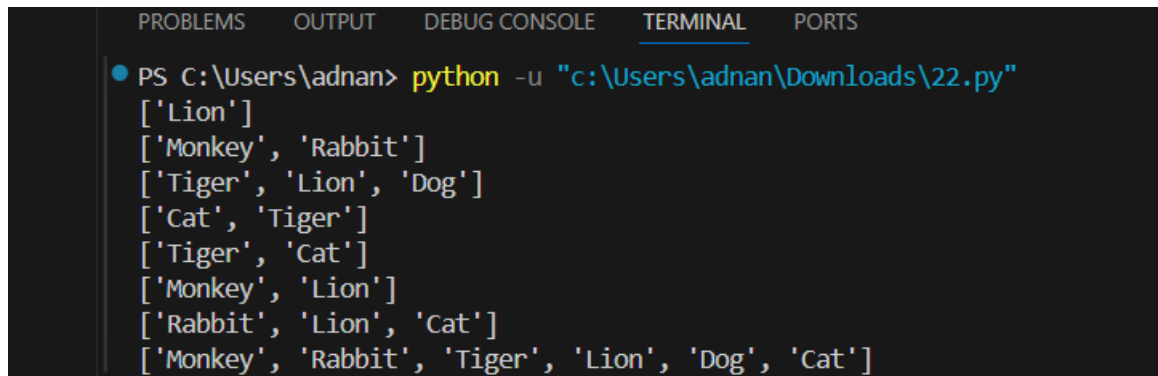
print(animallist[3::-3])

```python
print(animallist[-1:-5:-3])

print(animallist[4::-2])

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

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.py"
['Lion']
['Monkey', 'Rabbit']
['Tiger', 'Lion', 'Dog']
['Cat', 'Tiger']
['Tiger', 'Cat']
['Monkey', 'Lion']
['Rabbit', 'Lion', 'Cat']
['Monkey', 'Rabbit', 'Tiger', 'Lion', 'Dog', 'Cat']
```

7. 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) []

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

print(len(l1))

l1[2] = False
```

```python
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)
```

```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.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]
[]
```

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

1) reverse the list

2) sort in ascending order

3) sort in descending order

list5 = [50, -1, 2, 100, -6, -3, 67, 79, -55]

list5.reverse()

print(list5)
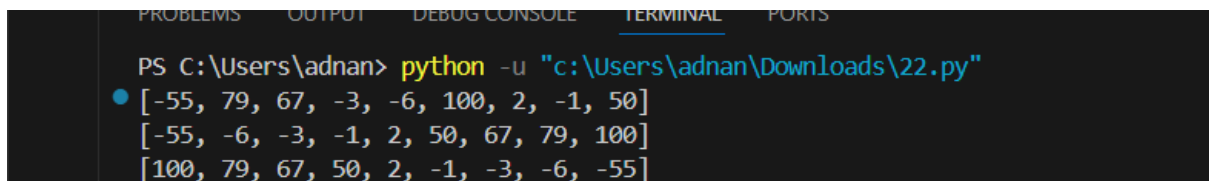

list5.sort()

print(list5)

list5.sort(reverse=True)

print(list5)

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\22.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]
```