```
#1. Python program to create lists using range() function.
#i. Numbers from 0 to 20.
#ii. Create lists with integers from 5 to 19.
#iii. Create lists with even numbers from 3 to 20.


# i.From 0 to 20.
num020 = list(range(0,21))
print("0 to 20: ", num020)
# ii.From 5 to 19.
num519 = list(range(5,20))
print("5 to 19: ", num519)
# iii.From 3 to 20.
numeven320 = []
for i in range(3,21):
 if ((i % 2) == 0):
    numeven320.append(i)
print("3 to 20: ", numeven320)
```

Output:

0 to 20: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]

5 to 19: [5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19]

3 to 20: [4, 6, 8, 10, 12, 14, 16, 18, 20]

Process finished with exit code 0

```
#2. Python program to access lists elements using loops.

list = list(range(0,10))
for i in list:
 print(i)
```

Output:

0

1

2

3

4

5

6

7

8

9

Process finished with exit code 0

```
#3. Python program to display the elements of a list in reverse order.
(Without using reverse method).
```

```
list = list(range(0,10))
print("List: ", list)
listreverse = list[::-1]
print("Reversed List: ", listreverse)
```

Output:

List: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Reversed List: [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]

Process finished with exit code 0

```
#4. Python program to understand list processing methods.

list = list(range(0,10))
print(list)
```

```
list.append(10)
print("Appended", list)
list.pop()
print("Poped: ", list)
listcpy = list.copy()
print("Copied list: ", listcpy)
c = list.count(5)
print("Count: ", c)
i = list.index(5)
list.insert(2, 99)
print("Insert: ", list)
list.remove(99)
print("Remove: ", list)
list.reverse()
print("Reverse: ", list)
list.sort()
print("Sort: ", list)
list.clear()
print("Clear: ", list)
```

Output:

[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Appended [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Poped: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Copied list: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Count: 1

Insert: [0, 1, 99, 2, 3, 4, 5, 6, 7, 8, 9]

Remove: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Reverse: [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]

Sort: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

Clear: []

Process finished with exit code 0

```
#5. Python program to find maximum and minimum elements in a list of elements
without using list methods.

list = [43,12,34,0,45,23,-4]
length = len(list)
for i in range(0,length):
```

```
 for j in range(0, (length-i-1)):
    if list[j] < list[j+1]:
        list[j],list[j+1] = list[j+1],list[j]
print("Max: ", list[0])
print("Min: ", list[-1])
```

Output:

Max: 45

Min: -4

Process finished with exit code 0

```
#6. Python program to find common elements in two lists.

list1 = [1,2,3,4,5,6]
list2 = [5,6,7,8,9,0]
set1 = set(list1)
set2 = set(list2)
if (set1 & set2):
 common = list(set1 & set2)
```

```
 print("Common: ", common)
else:
 print("No common elements.")
```

Output:

Common: [5, 6]

Process finished with exit code 0

```
#7. Python program to multiply all numbers in the list.

lst = list(range(1,11))
l = len(lst)
prod = 1
print("List: ", lst)
for i in range(0, l):
 prod *= lst[i]
 lst[i] *= 10
```

```
print("New List: ", lst)
print("Multiplication of all elements: ", prod)
```

Output:

List: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

New List: [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

Multiplication of all elements: 3628800

Process finished with exit code 0

```
#8. Python Program to Find the Second Largest Number in a List.

lst = [1,2,3,4,5,85,94,63,100]
l = len(lst)
for i in range(0,l):
 for j in range(0, (l-i-1)):
    if lst[j] < lst[j+1]:
        lst[j],lst[j+1] = lst[j+1],lst[j]
print("Second largest element: ", lst[1])
```

Output:

Second largest element: 94

Process finished with exit code 0