Q1:

a = [1, 2, 3, 4, 6]

if len(a) == 0:

    print("List is empty")

else:

    print("List is not empty")

Q2:

a = []

for i in range(0, 10):

    n = int(input("Enter number: "))

    a.append(n)

print(a)

odd = []

for i in range(0, 10):

    if a[i] % 2 != 0:

        odd.append(a[i])

print(odd)

Q3:

a = [12, 456, 789, 421, 4578]

a.sort()

print(f"second smallest number is {a[1]}")

Q4:

a = [12, 456, 789, 421, 4578]

a.sort()

print(a)

print(f"second largest number is {a[-2]}")

Q5:

# print unique values

a = [45, 3, 65, 45, 123, 65, 3, 65, 45, 2, 3, 5, 65, 3, 7]

b = []

for i in a:

    if i not in b:

        b.append(i)

# print(b)

# print frequency of each value

for i in b:

    count = a.count(i)

    if count > 3:

        print(i)

# print(f"{i} occurs {count} times")

Q6:

a = []

b = []

for i in range(0, 10):

    num = int(input("enter num"))

    a.append(num)

print(a)

b = a.copy()

b.reverse()

print(b)

Q7:

a = [1, 2, 3, 4, 5, 6]

print(sum(a) / len(a))

Q8:

a = [45, 3, 65, 45, 123, 65, 3, 65, 45, 2]

b = [2, 3, 4, 5, 5]

b = a.extend(b)

print(a)

a.sort()

a.reverse()

print(a)

Q9:

a = [23, 24, 45, 5, 66, 78]

add = a[1] + a[-2]

print(add)