

Q1

- ☒ l1 = [1, 20, 30, 40] index of l1 starts from 0.
- ☐ Lists are immutable we are unable to update the list.
- ☐ a = [100, 23, 32] print(a * 0) returns [100, 23, 32].

Q2

List01.py

```
1 l=list(map(str,input("data: ").split(",")))
2 print("list:",l)
3 ind=int(input("index: "))
4
5 try:
6     print("element:",l[ind])
7 except:
8     print("invalid")
```

Q3

Listmem01.py

```
1 data=list(map(str,input("data: ").split(",")))
2 ele=str(input("element: "))
3 if(ele in data):
4     print("True")
5 else:
6     print("False")
```

Q4

List4.py

```
1 l=list(map(str,input("data: ").split(",")))
2 last=len(l)-1
3
4 print("first, last elements: {0} {1}".format(l[0],l[last]))
```

Q5

Listslicing.py

```

1 a = [9, 8, 7, 6, 5, 4]
2
3 # write your code here
4 print("a =",a)
5 print("a[0:3] =",a[0:3])
6 print("a[:4] =",a[:4])
7 print("a[:] =",a[:])
8 print("a[2:2] =",a[2:2])
9 print("a[0:6:2] =",a[0:6:2])
10 print("a[-3:] =",a[-3:])
11 print("a[:-3] =",a[:-3])

```

Q6

List4.py

False

```

1 l=list(map(int,input("data: ").split(",")))
2 if(l[0]==3 or l[-1]==3):
3     print("True")
4 else:
5     print("False")

```

Q7

Listcatrep01.py

```

1 l1=list(map(str,input("data1: ").split(",")))
2 l2=list(map(str,input("data2: ").split(",")))
3 n=int(input("num: "))
4 print(l1*n)
5 print(l2*n)
6
7 l1+=l2
8
9 # l1.extend(l2)
10 print("extending list1 with list2: {}".format(l1))

```

Q8

Listcomp01.py

```

1 l1=list(map(str,input("data1: ").split(",")))
2 l2=list(map(str,input("data2: ").split(",")))
3
4 print("is equal: {}".format(l1==l2))
5 print("is not equal: {}".format(l1!=l2))

```

Q9

List6.py

```

1 l=list(map(str,input("data: ").split(",")))
2 if(l[0]==l[-1]):
3     print("equal")
4 else:
5     print("not equal")

```

AL.

Q10

Listmutab.py

```

1 l1=list(map(str,input("data: ").split(',')))
2 print("before updation: {}".format(l1))
3 ind=int(input("index: "))
4
5 if(ind>len(l1)-1 or (len(l1)+ind<0):
6     print("invalid")
7     exit()
8 ele=str(input('element: '))
9
10
11 l1[ind]=ele
12 print("after updation: {}".format(l1))
13

```

Q11

List8.py

```

1 l=list(map(int,input("data: ").split(",")))
2 print(l)
3 print("largest among first, last elements: {}".format(max(l[0],l[-1])))

```

mple.

Q12

Listalias.py

```
1 l1=list(map(str,input("data: ").split(",")))
2 l2=l1
3
4 print("list1 is list2: {0}".format(l1 is l2))
5 print("list2 is list1: {0}".format(l2 is l1))
6
7 ind=int(input("index: "))
8
9 if(ind>len(l1)-1) or (ind<0):
10     print("enter valid index")
11
12 else:
13     ele=str(input("element: "))
14     l1[ind]=ele
15
16     print("list1 is list2: {0}".format(l1 is l2))
17     print("list2 is list1: {0}".format(l2 is l1))
18
```

Q13



Listcloning.py

```

1  # Demo for cloning using slicing
2  a = [1, 2, 3, 4, 5]
3  print("a =", a)
4  print("b = a[:]")
5  # Write the code to clone using slicing method
6  b=a[:]
7
8  print("b =", b)
9  print("a is b ? :", a is b)
10
11 # Demo for cloning using list function
12 a = [1, 2, 3, 4, 5]
13 print("b = list(a)")
14 # Write the code to clone elements in a to b using list
15 b=list(a)
16
17 print("b =", b)
18 print("a is b ? :", a is b)
19 print("a[0] = 100 ")
20 # Write the code to set a[0] to 100
21 a[0]=100
22
23 print("a =", a)
24 print("b =", b)
25
26
27 # Demo for cloning using copy method
28 a = [1, 2, 3, 4, 5]
29 print("a =", a)
30 print("b = a.copy()")
31 # Write the code to clone a list of elements in a to b using the copy method
32 b=a.copy()
33 print("b =", b)
34 print("a is b ? :", a is b)

```

Q14



List7.py

```

1  l1=list(map(str,input("data1: ").split(",")))
2  l2=list(map(str,input("data2: ").split(",")))
3
4  if(l1[0]==l2[0]) or (l1[-1]==l2[-1]):
5      print(True)
6  else:
7      print(False)

```

is print

Listremdelpop.py

```
1  #del
2  dlist = ['red', 'orange', 'blue', 'green', 'yellow', 'cyan']
3  print("dlist =", dlist)
4  print("del dlist[5]")
5  #delete element 5
6  del dlist[5]
7  # print the result
8  print("dlist =", dlist)
9  print("del dlist[2:]")
10 del dlist[2:]
11 print("dlist =", dlist)
12 print("del dlist")
13 del dlist
14
15 #remove
16 remlist = ['red', 'orange', 'blue', 'green', 'yellow', 'cyan']
17 print("remlist =", remlist)
18 print("remlist.remove('green')")
19 # remove green from the list and print the list
20 remlist.remove('green')
21 print("remlist =", remlist)
22
23 #pop
24 plist = ['red', 'orange', 'blue', 'green', 'yellow', 'cyan']
25 print("plist =", plist)
26 print("elem = plist.pop(2)")
27
28 # remove element at index 2
29 print("element popped & removed :", plist[2])
30 plist.pop(2)
31 print("plist =", plist)
32 print("elem = plist.pop()")
33
34 # remove last element
35
36 print("element popped & removed :", plist[-1])
37 plist.pop(-1)
38 print("plist =", plist)
39 print("plist.clear()")
40 plist.clear()
41 print("plist =", plist)
```

Q16

List11.py

```
1 d=list(map(str,input("data: ").split(",")))
2 print(d)
3 res=[]
4 for i in d:
5     if i not in res:
6         res.append(i)
7 print("after removing duplicates:",res)
8
```