

Assessment questions – Lists

1) What does the following piece of a program do? Show the output.

```
st1 = [1,7,2,4,3]
st2 = [1,9,3,5,4]
print(st1[0]+st2[3])
print(st1[3]*st2[1])
print(len(st1))
st1.append(10)
print(st1)
st2.pop()
print(st2)
st2.remove(9)
print(st2)
print(max(st1))
```

2) What does the following piece of a program do? Show the output.

```
apples = [10,20,30,40,50]
print(apples[1]+apples[4])
print(len(apples))
apples.append(25)
print(apples)
```

3) What does the following piece of a program do? Show the output.

```
pears = [11,22,33,44]
print(pears.pop())
print(pears)
pears.remove(22)
print(pears)
```

4) Given a list `scores` of integer values, for example `scores = [1, -9, 8, 70, 60, 88, 91, 182, -10]`

Write the commands to display the smallest and the greatest values using built-in functions `max()` and `min()`:



5) Given three Python lists, `names`, `ages`, and `phones`, I would like to “build” a new Python list `result`, with three elements: the first element is the first element in the list `names`, the second element is the second element in the list `ages` and the third element is the third element in the list `phones`.

For example, if
`names = ['Tom', 'David', 'Jane']`
`ages = [19, 27, 34]`
`phones = ["716-763-4534", "938-647-2351", "817-982-3424"]`

then `result` should be the list `['Tom', 27, "817-982-3424"]`

6) I have the list of the first five test scores of one of my students:

```
scores = [98, 70, 60, 88, 91]
```

I will need to add two more test scores later on.

Write the program that has the list of scores above in the very beginning.

Then it prompts for two more test scores to be entered by the user.
These two test scores should be added to the list `scores` shown above.

The updated list of scores should be then displayed, along with the smallest and greatest test scores.

Here is an example of the input prompt and output:

```
-----  
The tests scores we have so far: [98, 70, 60, 88, 91]  
  
Enter the next test score: 97  
  
Enter the last test score: 89  
-----  
The updated list of test scores is [98, 70, 60, 88, 91, 97, 89]  
  
The smallest test score is 60  
  
The greatest test score is 98  
-----
```

