



6.11. Chapter Assessment

Check your understanding

sequences-10-1: What will the output be for the following code?

```
let = "z"
let_two = "p"
c = let_two + let
m = c*5
print(m)
```

- ☐ A. zpzpzpzpzp
- ☐ B. zzzzzppppp
- ☒ C. pzpzpzpzp
- ☐ D. pppppzzzzz
- ☐ E. None of the above, an error will occur.

Check me

Compare me

✓ Yes, because let_two was put before let, c has "pz" and then that is repeated five times.

Activity: 1 -- Multiple Choice (assess_question2_1_1_1)

Write a program that extracts the last three items in the list `sports` and assigns it to the variable `last`. Make sure to write your code so that it works no matter how many items are in the list.

Save & Run

6/9/2020, 2:00:00 PM - 2 of 3

Show in CodeLens

```
1 sports = ['cricket', 'football', 'volleyball', 'baseball', 'softball', 'track and field']
2 last = sports[-3:]
3 print(last)
4
5
```

['curling', 'ping pong', 'hockey']

Activity: 2 -- ActiveCode (assess_ac_2_1_1_2)

| Result | Actual Value | Expected Value | Notes |
|--------|---------------|----------------|---|
| Pass | ['cur...key'] | ['cur...key'] | Testing that the value of last is the last three items in sports. |
| Pass | <__ma...ject> | True | Hardcode check |

Expand Differences

Expand Differences

You passed: 100.0% of the tests

Write code that combines the following variables so that the sentence "You are doing a great job, keep it up!" is assigned to the variable `message`. Do not edit the values assigned to `by`, `az`, `io`, or `qy`.

Save & Run

6/9/2020, 2:34:41 PM - 11 of 11

Show in CodeLens

```
1 by = "You are"
2 az = "doing a great "
3 io = "job"
4 qy = "keep it up!"
5 message = by+" "+az+io+" "+qy
6 print(message)
7
8
9
```

You are doing a great job, keep it up!

Activity: 3 -- ActiveCode (assess_ac_2_1_1_3)

| Result | Actual Value | Expected Value | Notes |
|--------|------------------|--------------------|--|
| Pass | 'You are' | 'You are' | Testing original variables. |
| Pass | 'doing a great ' | 'doing a great ' | Testing original variables. |
| Pass | 'job' | 'job' | Testing original variables. |
| Pass | 'keep it up!' | 'keep it up!' | Testing original variables. |
| Pass | 'You a...t up!' | 'You a...t up!' | Testing that the value of message is what was expected. |
| Pass | 'You a...t up!' | 'by = ...e)\n\n\n' | Testing for hardcoding (Don't worry about actual and expected values). |

Expand Differences

Expand Differences

You passed: 100.0% of the tests

sequences-10-2: What will the output be for the following code?

```
ls = ['run', 'world', 'travel', 'lights', 'moon', 'baseball', 'sea']
new = ls[2:4]
print(new)
```

- ☐ A. ['travel', 'lights', 'moon']
- ☐ B. ['world', 'travel', 'lights']
- ☒ C. ['travel', 'lights']
- ☐ D. ['world', 'travel']

Check me

Compare me

✓ Yes, python is a zero-index based language and slices are inclusive of the first index and exclusive of the second.

Activity: 4 -- Multiple Choice (assess_question2_1_1_4)

sequences-10-3: What is the type of `m` ?

```
l = ['w', '7', 0, 9]
m = l[1:2]
```

- ☐ A. string
- ☐ B. integer
- ☐ C. float
- ☒ D. list

Check me

Compare me

✓ Yes, a slice returns a list no matter how large the slice.

Activity: 5 -- Multiple Choice (assess_question2_1_1_5)

sequences-10-4: What is the type of `m` ?

```
l = ['w', '7', 0, 9]
m = l[1]
```

- ☒ A. string
- ☐ B. integer
- ☐ C. float
- ☐ D. list

Check me

Compare me

✓ Yes, the quotes around the number mean that this is a string.

Activity: 6 -- Multiple Choice (assess_question2_1_1_6)

sequences-10-5: What is the type of `x` ?

```
b = "My, what a lovely day"
x = b.split(',')
```

- ☐ A. string
- ☐ B. integer
- ☐ C. float
- ☒ D. list

Check me

Compare me

✔ Yes, the `.split()` method returns a list.

Activity: 7 -- Multiple Choice (assess_question2_1_1_7)

sequences-10-6: What is the type of `a` ?

```
b = "My, what a lovely day"
x = b.split(',')
z = "".join(x)
y = z.split()
a = "".join(y)
```

- ☒ A. string
- ☐ B. integer
- ☐ C. float
- ☐ D. list

Check me

Compare me

✔ Yes, the string is split into a list, then joined back into a string, then split again, and finally joined back into a string.

Activity: 8 -- Multiple Choice (assess_question2_1_1_8)

Write code to determine how many 9's are in the list `nums` and assign that value to the variable `how_many`. Do not use a for loop to do this.

Save & Run

6/9/2020, 2:43:57 PM - 3 of 3

Show in CodeLens

```
1 nums = [4, 2, 23.4, 9, 545, 9, 1, 234.001, 5, 49, 8, 9, 34, 52, 1, -2, 9.1, 4]
2 how_many = nums.count(9)
3 print(how_many)
4
5
```

3

Activity: 9 -- ActiveCode (assess_ac2_1_1_9)

| Result | Actual Value | Expected Value | Notes |
|--------|--------------|-------------------|--|
| Pass | 3 | 3 | Testing that <code>how_many</code> is set correctly. |
| Pass | 'for' | 'nums ...ny)\n\n' | Testing that you didn't use a for loop. |
| Pass | None | False | Hardcode check |

Expand Differences

You passed: 100.0% of the tests

Write code that uses slicing to get rid of the the second 8 so that here are only two 8's in the list bound to the variable `nums`.

Save & Run

6/9/2020, 2:54:31 PM - 5 of 5

Show in CodeLens

```
1 nums = [4, 2, 8, 23.4, 8, 9, 545, 9, 1, 234.001, 5, 49, 8, 9, 34, 52, 1, -2, 9.1,
```

```

2 nums = nums[:4]+nums[5:]
3 print(nums)
4
5
6

```

[4, 2, 8, 23.4, 9, 545, 9, 1, 234.001, 5, 49, 8, 9, 34, 52, 1, -2, 9.1, 4]

Activity: 10 -- ActiveCode (assess_ac2_1_1_10)

| Result | Actual Value | Expected Value | Notes |
|--------|-----------------|----------------|---|
| Pass | [4, 2...1, 4] | [4, 2...1, 4] | Testing that nums is set correctly. |
| Pass | <__main__.ject> | True | Testing that you are using slices to remove the second 8 (Don't worry about actual and expected values) |

Expand Differences

Expand Differences

You passed: 100.0% of the tests

Assign the last element of `lst` to the variable `end_elem`. Do this so that it works no matter how long `lst` is.

Save & Run

6/9/2020, 2:47:16 PM - 3 of 3

Show in CodeLens

```

1 lst = ["hi", "goodbye", "python", "106", "506", 91, ['all', 'Paul', 'Jackie', "UMS"]
2 end_elem = lst[-1]
3 print(end_elem)
4

```

26trombones

Activity: 11 -- ActiveCode (access_ac_2_1_1_11)

| Result | Actual Value | Expected Value | Notes |
|--------|---------------|----------------|---|
| Pass | '26trombones' | '26trombones' | Testing that end_elem has the correct element assigned. |
| Pass | None | False | Hardcoding Check (Don't worry about actual and expected values) |

You passed: 100.0% of the tests

Assign the number of elements in `lst` to the variable `num_lst`.

Save & Run

6/9/2020, 2:48:14 PM - 2 of 2

Show in CodeLens

```

1 lst = ["hi", "goodbye", "python", "106", "506", 91, ['all', 'Paul', 'Jackie', "UMS"]
2 num_lst = len(lst)
3 print(num_lst)
4

```

Activity: 12 -- ActiveCode (access_ac_2_1_1_12)

| Result | Actual Value | Expected Value | Notes |
|--------|--------------|----------------|---|
| Pass | 30 | 30 | Testing that num_lst has the correct length assigned. |
| Pass | None | False | Hardcoding Check (Don't worry about actual and expected values) |

You passed: 100.0% of the tests

Create a variable called `wrds` and assign to it a list whose elements are the words in the string `sent`. Do not worry about punctuation.

Save & Run

6/9/2020, 2:48:54 PM - 2 of 2

Show in CodeLens

```
1 sent = "The bicentennial for our university was in 2017"
2 wrds = sent.split()
3 print(wrds)
4
```

```
['The', 'bicentennial', 'for', 'our', 'university', 'was', 'in', '2017']
```

Activity: 13 -- ActiveCode (assess_ac_2_1_1_13)

| Result | Actual Value | Expected Value | Notes |
|--------|---------------|----------------|---|
| Pass | ['The...017'] | ['The...017'] | Testing that wrds has been correctly assigned. |
| Pass | None | False | Hardcoding Check (Don't worry about actual and expected values) |

Expand Differences

You passed: 100.0% of the tests

You have attempted 14 of 13 activities on this page

6.10. Exercises">

6.10. Exercises">

✓ Completed. Well Done!

7. Iteration">

>

7. Iteration">Next Section - 7. Iteration