

Topic 3: Lists, Strings, Sets and Dictionaries

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Wed, June 23 2021

Announcements

① Quiz 1 is this Thursday:

- ① <https://ae3.engineering.illinois.edu/computer-based-testing-facility/information-for-students/exam-preparation/>
- ② <https://ae3.engineering.illinois.edu/computer-based-testing-facility/information-for-students/exam-preparation/>
<https://ae3.engineering.illinois.edu/computer-based-testing-facility/information-for-students/exam-procedure/>
- ③ Links are in chat, on the course website, and on the uploaded slides for future reference
- ④ **Make sure you have Zoom installed on your phone, tablet, or additional computer and are able to login with SSO.**

Poll Question: String Len

```
1 my_str = "le chat"  
2 my_str_length = len(my_str)  
3
```

A 6

B 8

C 7

D 5

E 3

F 4

Poll Question: String Concatenation

- Ⓐ TypeError
- Ⓑ "New""York"
- Ⓒ "New+York"
- Ⓓ "New York"
- Ⓔ "NewYork"

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- Ⓑ "New York"
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Poll Question: Negative Indexing

What is the result of the following segment of code?

```
1 x = "ABCDE"  
2 print(x[-3])  
3
```

- ☐ A SyntaxError
- ☐ B IndexError
- ☐ C 'A'
- ☐ D 'B'
- ☐ E 'C'
- ☐ F 'D'

Poll Question: Changing Strings

What is the value of `str1` after the following segment of code executes?

```
1 str1 = "urbana"  
2 str1[0] = "e"  
3
```

- ☐ A `SyntaxError`
- ☐ B `IndexError`
- ☐ C `TypeError`
- ☐ D `'erbana'`
- ☐ E `'eurbana'`

List Functions

What is the value of x after the following code executes:

```
1 x = "{1} {0} {1}".format("S", "O", "Y")  
2
```

- ☐ A "S O Y"
- ☐ B "SOY"
- ☐ C "O S O"
- ☐ D "Y O Y"
- ☐ E "OSO"

Poll Question: Indexing with Lists

1



Poll Question:

What does `list1` contain after the code above executes?

```
1 list1 = [1, 2]
2 list1.append([3, 4])
3
```

- ☐ A [1, 2]
- ☐ B [1, 2, 3, 4]
- ☐ C [1, 2, [3, 4]]
- ☐ D [[1, 2], [3, 4]]

Poll Question: Changing Lists

After the following code executes what gets outputted to the screen?

```
1 list1 = ["a", 5, "c", 234, ["hello", "world"]]
2 list[4] = "Hello, World!"
3 print(list1)
4
```

- ☐ A ['a', 5, 'c', 234, "Hello, World!"]
- ☐ B TypeError
- ☐ C SyntaxError
- ☐ D ['a', 5, 'c', 234, ["hello", "world", "Hello, World!"]]
- ☐ E ['a', 5, 'c', 234, ["Hello, World!"]]

Poll Question: Making Sets

Which of the follow are valid ways to construct a set?

- ☐ A `x = set(1, 2, 3)`
- ☐ B `x = set([1, 2, 3])`
- ☐ C `x = [1, 2, 3, 4]`
- ☐ D `x = {1, 2, 3, 4}`
- ☐ E `x = {[1, 2, 3, 4]}`

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- ☐ E `x = {[1, 2, 3, 4]}`

- 1 **set()** → Creates either a new set by either accepting and converting another sequence type (e.g., list, tuple) or creates an empty list if it's not given anything.
- 2 **set literal** → Written using the {}.

Poll Question: Set Tracing

```
1 set1 = {" "}  
2 set2.add(2)  
3
```

A

Poll Question:

A

Poll Question:

A

List Functions

