

# Presentation 5

## **Strings**

# Announcements For This Lecture

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## Assignment 1

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- Will post it on Sunday
  - Need one more lesson
  - But start *reading* it
- Due Wed Sep. 30<sup>th</sup>
  - Revise until correct
  - Final version Oct 7th
- Do not put off until end!

## Getting Help

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- Can work in pairs
  - Will provide matching
  - Submit one for both
- Lots of consultant hours
  - Come early! Beat the rush
  - Also use TA office hours
- One-on-Ones next week

# One-on-One Sessions

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- Starting **Monday**: 1/2-hour one-on-one sessions
  - Bring computer to work with instructor, TA or consultant
  - Hands on, dedicated help with Labs 5 & 6 (and related)
  - To prepare for assignment, **not for help on assignment**
- **Limited availability: we cannot get to everyone**
  - Students with experience or confidence should hold back
- Sign up online in CMS: first come, first served
  - Choose assignment One-on-One
  - Pick a time that works for you; will add slots as possible
  - Can sign up starting at 5pm **TOMORROW**

# Even More Announcements

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## The AI Quiz

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- Must finish **before** A1
  - Will reject assignment
  - Means a 0 by Oct 7
- Current statistics
  - ~34 have not passed
  - 9 have not taken
- E-mails sent tomorrow

## Keeping Up With Videos

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- **Today**
  - **Lesson 6:** Strings
- Next Time
  - **Lesson 7:** Specifications
  - **Lesson 8:** Testing
  - Notice that it is a lot
  - Important for A1

# String are Indexed

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- `s = 'Hello all'`

- What is `s[3:6]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 'lo a'

B: 'lo'

C: 'lo '

D: 'o '

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[3:6]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 'lo a'

B: 'lo'

C: 'lo '      **CORRECT**

D: 'o '

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[:4]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 'o all'

B: 'Hello'

C: 'Hell'

D: **Error!**

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[:4]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 'o all'

B: 'Hello'

C: 'Hell' **CORRECT**

D: **Error!**

E: I do not know



# String are Indexed

---

- `s = 'Hello all'`

- What is `s[6:-2]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: ""

B: 'a'

C: 'al'

D: **Error!**

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[6:-2]`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: ""

B: 'a'

**CORRECT**

C: 'al'

D: Error!

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s.find('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2

B: 3

C: 7

D: 8

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s.find('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2

**CORRECT**

B: 3

C: 7

D: 8

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s.rfind('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2

B: 3

C: 7

D: 8

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s.rfind('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2

B: 3

C: 7

D: 8

**CORRECT**

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[5:].find('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2

B: 3

C: 7

D: **Error!**

E: I do not know

# String are Indexed

---

- `s = 'Hello all'`

- What is `s[5:].find('l')`?

0	1	2	3	4	5	6	7	8
H	e	l	l	o		a	l	l

A: 2      **CORRECT**

B: 3

C: 7

D: Error!

E: I do not know



Questions?

# String Extraction Puzzle

---

```
def second(text):
```

```
    """Returns: second elt in text
    The text is a sequence of words
    separated by commas, spaces.
    Ex: second('A, B, C') rets 'B'
    Param text: a list of words"""
```

```
1  start = text.index(',') # SEARCH
2  tail = text[start+1:]  # CUT
3  end = tail.index(',')  # SEARCH
4  result = tail[:end]    # CUT
5  return result
```

```
>>> second('cat, dog, mouse, lion')
'dog'
>>> second('apple, pear, banana')
'pear'
```

# String Extraction Puzzle

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def second(text):
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    """Returns: second elt in text
    The text is a sequence of words
    separated by commas, spaces.
    Ex: second('A, B, C') rets 'B'
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```
>>> second('cat, dog, mouse, lion')
'dog'
>>> second('apple, pear, banana')
'pear'
```

Where is the error?

- A: Line 1
- B: Line 2
- C: Line 3
- D: Line 4
- E: There is no error

# String Extraction Puzzle

```
def second(text):
```

```
    """Returns: second elt in text
    The text is a sequence of words
    separated by commas, spaces.
    Ex: second('A, B, C') rets 'B'
    Param text: a list of words"""
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2 tail = text[start+1:]   # CUT
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5 return result
```

```
>>> second('cat, dog, mouse, lion')
```

```
'dog'
```

```
>>> second('apple, pear, banana')
```

```
'pear'
```

```
tail = text[start+2:]
```

**OR**

```
result = tail[:end].strip()
```