

# CSE 160 Exam Cheat Sheet

```
# if/elif/else syntax
if condition1:
    # statements
elif condition2:
    # other statements
else:
    # more statements
```

```
# for loop syntax
for i in sequence:
    # statements

# function definition syntax
def function_name(param1, param2, ...):
    # statements
```

| Function  | Description   |
|---|---|
| <code>range([<i>start</i>,] <i>stop</i> [, <i>step</i>])</code> | Returns a sequence of numbers from <i>start</i> (inclusive) to <i>stop</i> (exclusive) incremented by <i>step</i> |
| <code>len(<i>Lst</i>)</code>                                    | Returns the number of elements in <i>Lst</i>  |

## Lists

| Function   | Description  |
|--|--|
| <code>lst = []</code>                                      | Creates an empty list  |
| <code>lst[<i>idx</i>]</code>                               | Returns the element in <i>Lst</i> at index <i>idx</i>  |
| <code>lst[<i>start:end</i>]</code>                         | Returns a sublist of <i>Lst</i> from index <i>start</i> (inclusive) to index <i>end</i> (exclusive)                              |
| <code>lst.append(<i>elmt</i>)</code>                       | Adds the element <i>elmt</i> to the end of <i>Lst</i> . Returns <b>None</b> .  |
| <code>lst.extend(<i>myLst</i>)</code>                      | Extend <i>Lst</i> by appending the elements in <i>myLst</i> to the end of <i>Lst</i> . Returns <b>None</b> .                     |
| <code>lst.index(<i>elmt</i>)</code>                        | Returns index of the first occurrence of <i>elmt</i> in <i>Lst</i> . Error if <i>elmt</i> is not in <i>Lst</i>                   |
| <code>lst.count(<i>elmt</i>)</code>                        | Returns the number of times <i>elmt</i> occurs in <i>Lst</i>   |
| <code>lst.remove(<i>elmt</i>)</code>                       | Removes first occurrence of <i>elmt</i> from <i>Lst</i> , Error if <i>elmt</i> is not in <i>Lst</i> . Returns <b>None</b> .      |
| <code>lst.pop(<i>idx</i>)</code><br><code>lst.pop()</code> | Removes and returns the element at index <i>idx</i> in <i>Lst</i> .<br>With no parameter, removes the last element in <i>Lst</i> |
| <code>lst.insert(<i>idx</i>, <i>elmt</i>)</code>           | Inserts an element <i>elmt</i> in list at index <i>idx</i> . Returns <b>None</b> .   |

## File I/O

| Function                                     | Description  |
|--|--|
| <code>my_file = open(<i>filepath</i>)</code> | Opens the file with given <i>filepath</i> for reading, returns a file object |
| <code>my_file.close()</code>                 | Closes file <i>my_file</i>   |

```
# Process one line at a time:
for line_of_text in my_file:
    # process line_of_text
```

```
# Process entire file at once
all_data_as_a_big_string = my_file.read()
```