CSE 160 26wi Midterm Exam Reference 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
```

Sequences and Lists

`range([start,] stop [, step])`	Returns a sequence of numbers from ***start*** (inclusive) to ***stop*** (exclusive) incrementing by ***step***
`len(lst)`	Returns the number of elements in ***lst***
`lst = []`	Creates an empty list
`lst[idx]`	Returns the element in ***lst*** at index ***idx***
`lst[start:end:step]`	Returns a slice of ***lst*** from index ***start*** (optional) to index ***end*** (exclusive), incrementing by ***step*** (optional)
`lst.append(elmt)`	Adds the ***elmt*** to the end of ***lst***, returns **None**
`lst.extend(sequence)`	Adds each of the elements in ***sequence*** to the end of ***lst***, returns **None**
`lst.index(elmt)`	Returns the index of the first occurrence of ***elmt*** in ***lst***, errors if ***elmt*** is not in ***lst***
`lst.count(elmt)`	Returns the number of times ***elmt*** occurs in ***lst***
`lst.remove(elmt)`	Removes the first occurrence of ***elmt*** from ***lst***, errors if ***elmt*** is not in ***lst***, returns **None**
`lst.pop(idx)` `lst.pop()`	Removes and returns the element at index ***idx*** in ***lst*** With no parameter, removes the last element in ***lst***
`lst.insert(idx, elmt)`	Inserts ***elmt*** into ***lst*** at index ***idx***, returns **None**

File I/O

```
file = open(filepath, "r")

# read entire file at once
file.read()
file.close()
```

```
file = open(filepath, "r")

# read line by line
for line in file:
    # process line
```

```
file = open(filepath, "w")

# write entire file at once
file.write(string_to_write)
file.close()
```