#### Problem 6

Create a function that returns true if a given inequality expression is correct and false otherwise.

```
def correct_signs(s):
return eval(s)
```

## **Problem 7**

Write a function that takes a list and a number as arguments. Add the number to the end of the list, then remove the first element of the list. The function should then return the updated list.

```
def next_in_line(list_numbers):
if len(list_numbers[0]) == 0:
    print("No list has been selected")
    return
else:
    list_numbers[0].append(list_numbers[1])
    del(list_numbers[0][0])
    return list_numbers[0]
```

# **Problem 8**

Create a function that takes a list of strings and integers, and filters out the list so that it returns a list of integers only.

```
def filter_list(list_things):
list_integers = []
for i in range(len(list_things)):
    if type(list_things[i])==int:
        list_integers.append(list_things[i])
return list_integers
```

# **Problem 9**

A set is a collection of unique items. A set can be formed from a list from removing all duplicate items.

```
[1, 3, 3, 5, 5, 5] # original list
```

[1, 3, 5] # original list transformed into a set

Create a function that sorts a list and removes all duplicate items from it.

```
def setify(list_numbers):
#you could use the set() functions, but it returns a set, not a list
unique_list = []
for i in range(len(list_numbers)):
    if list_numbers[i] not in unique_list:
        unique_list.append(list_numbers[i])
unique_list.sort() #ordering
return unique_list
```

## **Problem 10**

Create a function that takes a string and returns a new string with all vowels removed.

```
def remove_vowels(string):
string = string.replace("a", "")
string = string.replace("e", "")
string = string.replace("i", "")
string = string.replace("o", "")
string = string.replace("u", "")
return string
```