

## Week 7 In-class Exercises 2

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### 1) Modify the rock paper scissor game from Week 5 Question 3

Using the rock paper scissor game used in week 5, create a program that plays the game for 10 rounds. After the 10 games

1a) Prints the results of all the games

1b) Print the rounds in which you won

1c) If you score 1 point for winning, 0 points for draws and -1 points for losing, how many points did you score?

**Lists have more useful functions, such as `extend(x)`, `pop(x)`, and `reverse()`.**

- `list.extend(x)` - Extend the list by appending all the elements in the given list.
- `list.pop(x)` - Remove an element at index `x` from the list and return it. If `x` isn't specified, remove the last element from the list and return it.
- `list.reverse()` - Reverse the elements in the list.

**There is a range of functions available that can be used on a list.**

- `len(list)` - Return the number of elements in the list.
- `max(list)` - Return the element from the list with max value.
- `min(list)` - Return the element from the list with min value.
- `sum(list)` - Return the total value of elements in the list.

### 2) Using the list `my_list` from Exercises 1 Question 1

Create another list, for example

```
my_second_list = [2, 18, 10, 50, 39, 25]
```

- 2a) Add the elements from the second list to the first list. Create two solutions, one using `append(x)` and the other using `extend(x)`.**
- 2b) Create a function that prints out the smallest and largest numbers in the combined list.**
- 2c) Create a function using a loop that prints the number of elements in the combined list.**
- 2d) Can you achieve 2c without the use of a loop?**
- 2e) Create a function using a loop that prints the sum of all the numbers in the combined list.**
- 2f) Can you achieve 2e without using a loop?**

**3) Generate a list that stores 5 names that the user enters**

Write a program that will allow the user to enter 5 names. Store these names in a list.

- 3a) Create a function that prints the entire list**
- 3b) Create a function that prints the list of names in alphabetical order**
- 3c) Create a function that prints the list of names in reverse-alphabetical order**