

Remember to hand in your MATLAB codes and any program output.

- a) (5 pts) Write a MATLAB function that will count the number of times that a given character appears in some input string. You should do this using an accumulation loop. Test your function by counting the number of times
- a) the letter 'a'
 - b) the letter 'z'
 - c) a space

appear in the string

```
s = 'There are many spaces in this sentence.'
```

- 2) (2 pts) Repeat Problem 1, but this time use the built in string functions to do the counting. There are several ways this can be done.
- 3) (1 pts) Use the `strrep` command to replace all the spaces in the string from Problem 1 with underscores.