# CS005 Lab 9:

**Part 1:**

Write a function takes in a sentence of exactly six words, and displays its acronym (all upper case) line by line.
The function can return a dummy variable, `function dummy = Acrostic(A)`

---

>> Acrostic('Every august my other niece nebulizes')

E

A

M

O

N

N

Acrostic('And You're Telling Me This Because?')

A

Y

T

M

T

B

---

**Part 2:**

Write the same function as before above, but this time it displays the text on a single line, and *returns* the acronym string.

The function must return a string, `function AcronymString = Acrostic(A)`

---

>> acronym = Acrostic('Every august my other niece nebulizes');

EAMONN

>> acronym = Acrostic('And You're Telling Me This Because?')

AYTMTB

---

**Extra Credit!**

You can gain 20% extra credit on these two questions if you make your code work for any number of words, not just six.

**Part 3:**

Write a function takes in a sentence of exactly six words, and displays each word line by line.
The function can return a dummy variable, `function dummy = LineByLine(A)`

---

>> LineByLine('Every august my other niece nebulizes')

Every

august

my

other

niece

nebulizes

---

**Extra Credit!**

You can gain 20% extra credit if you can do the line by line *backwards*, like this....

---

>> LineByLine('Every august my other niece nebulizes')

nebulizes

niece

other

my

august

Every

---

**Part 4:**

Write a function takes in a sentence, and returns and displays the number of spaces. The output should be exactly as I have indicated below

---

>> SpaceCount = NumSpaces('Every august my other niece nebulizes');

The sentence:

Every august my other niece nebulizes

Has 5 spaces

>> SpaceCount = NumSpaces('Every        august my other niece nebulizes');

The sentence:

Every        august my other niece nebulizes

Has 12 spaces

**Part 5:**

Write a function that takes in a sentence and returns true if it has at least one uppercase letter.

**Hint**: How do we know if a letter is upper case. We *don't* want to do this...

```
if A(i) == 'A'
    HasUpperCase = 1;
elseif A(i) == 'B'
    HasUpperCase = 1;
elseif A(i) == 'C'
    HasUpperCase = 1;
(etc etc)
```

That would work, but take a lot of code.

Think about this, what does this return..

```
MyMI = 'j';
upper(MyMI) == MyMI
```

Now what this does return?

```
MyMI = 'J';
upper(MyMI) == MyMI
```

Get it?   ;-)