1. Write a program that will convert the first letter of all words to uppercase. Have it do this for an arbitrary string input by the user.

Sample run of the program:

Enter a string: i am keeping all words Uppercase!
I Am Keeping All Words Uppercase!

2. Use a regular expression to count the number of digits, characters, whitespace characters and words in a string.

Sample run of the program:

Enter a string: This is 1 string, 7 words long.
It has 2 digits, 6 whitespaces and 7 words.

3. Write a regular expression that will search a string and match a valid number. A number can have any number of digits, but it can have only digits and a decimal point. The decimal point is optional, but if it appears in the number, there must be only one, and it must have digits on its left and its right. There should be whitespace or a beginning or end-of-line character on either side of a valid number. Negative numbers are preceded by a minus sign.

Sample run of the program:

3 has a number.
3.14 has a number.
.14 does not have a number.
-3 has a number.
3.14.14 does not have a number.
aa3.14 does not have a number.
3.14a does not have a number.