Name, Surname. :

**ACM 114 Introduction to Computer Science and Programming**
**2017-2018 SPRING Final**

Q-1) Every number N can be written in quotient reminder form such that N=A*Q+R. Write a function which finds Q and R for given two numbers (N and A) and returns them in list.
(eg. 270=192*1+78 or . Hint integer division is // in python 3.)

```
print(foo(270,192) )

[78,1]
```

Q-2) Write a function multiply(s), which takes in a list s and returns the product of its elements.

```
Print (multiply([2,3,5]))
30
```

Q-3) Write a function that takes a string of words separated by spaces (assume no punctuation or capitalization), together with a ”target” word, and shows the position of the target word in the string of words. For example, if the string is: **we dont need no education we dont need no thought control no we dont**
and the target is the word ”dont” then your procedure should return the list 1, 6, 13 because ”dont” appears at the 1st, 6th, and 13th position in the string. (We start counting positions of words in the string from 0.) Your procedure should return False if the target word doesn’t appear in the string.

Q-4) You need to write a Java program to check if two given strings are anagrams of Each other. Two strings are anagrams if they are written using the same exact letters . Each letter should have the same count in both strings. For example, Army and Mary are anagram of each other.
(hint : take every character in the first string and check for the existence in the second one. If one of the characters is not in the second one then it is not an anagram, if all the characters of the first string is in the second one then it is an
anagram).

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Each question is 25 points.
Good Luck.