Question 1: Resubmission of `Subtract`

Any student who resubmits `Subtract.m` has to *revise his/her own code*, not copy from one of the examples obtained through Coursework 2. An easy way to make the difference between your old version and your new version visible is the following Matlab command (assume that you have saved your old version as `Subtractold.m`, and that the new version is `Subtract.m`):

```
>>visdiff('Subtract.m','Subtractold.m');
```

I will use `visdiff` to check if you really worked on your own code. The changes should be kept to a minimum and explained in comments behind the changed lines!

Upload to Victory as attachments revised version of `Subtract.m` and, if necessary, other files that contain functions which you call inside `Subtract`. The Victory assignment is called `CW1-Resubmission`.

Question 2: `Divide` — division with remainder

Write a function that takes a row vector x of single digits (representing a large integer) and a digit y from $1,\ldots,9$ and returns the quotient $q = x/y$ rounded down to the nearest integer, and the remainder $r = x - qy$. Step-by-step instructions:

1. Create a new `m` file and save it as `Divide.m`. This file will contain the function `Divide`.
2. The first line of the function file `Divide.m` has to look like this:

   ```
   function [q,r]=Divide(x,y)
   ```

   Add your code and test your function on some examples (see Hints below).

Upload to Victory as attachments the file `Divide.m` and, if necessary, other files that contain functions which you call inside `Divide` as attachments to Victory. The Victory assignment is called `CW1-Resubmission`.

Hints and further instructions for `Divide`

- Your function should behave like this on the command-line:

```
>> [q,r]=Divide([1,2,3],7)
q = 1 7
r = 4
>> [q,r]=Divide(2*ones(1,43),7)
q =  Columns 1 through 22
 3 1 7 4 6 0 3 1 7 4 6 0 3 1 7 4 6 0 3 1 7 4
     Columns 23 through 42
 6 0 3 1 7 4 6 0 3 1 7 4 6 0 3 1 7 4 6 0
r = 2
```

- Otherwise, the rules are identical to the rules of Coursework 1. That is, your function can rely on getting valid inputs and has to return valid outputs (removing leading zeros from q and r, etc.)
- 0 counts as valid input for x but not for y.