1 CSC299 - - Lab Assignment 2

IMPORTANT INSTRUCTIONS

Use this URL to verify your progress:

`https://mdp.cdm.depaul.edu/csc299`

Login into:

`mdp.cdm.depaul.deu`

Under your csc299 folder create a new folder called `lab02` and, under the latter, create a new file called `README.md`. This file should start with:

```
Name: <yourname>
StudentId: <yourstudentid>
Email: <youremail>
```

Put the answers to the questions belong in the file `/csc299/lab02/README.md`.
After completing each task below remember to do:

```
cd ~/csc299
git add .
git commit -a -m "task completed"
git push
```

else I will not receive your work.

1.1 Task 1 (3 points)

Change folder and go under `/csc299/lab02`.
Create a program called `program1.py` which contains:

```
from random import randint
myfile = open('data.csv','w')
for k in range(1000):
    myfile.write(', '.join([str(randint(0,1000)) for i in '0123'])+'\n')
```

Run it and make sure it creates a CSV file which contains 4 columns and 1000 rows of random numbers.

1.2 Task 2 (4 points)

Write a program in the same folder as the one above, called `program2.py` which when called with:

```
python program2.py
```

reads the above `data.csv` file and computes the totals of each column and stores in a file `sums.csv` the 4 numbers in one line separated by a comma. For example:

```
12344, 21123, 41212, 31244
```

1.3 Task 3 (4 points)

Write a program in the same folder as the one above, called `program3.py` which takes no input. The program will produce a file called `bincount.csv` which contains:

```
1, 10
2, 7
3, 10
...
```

The first column is a progressive number and the second column counts the number of files in `/bin/` which have a filename length equal to the value in the first column. Example 10 files of length 1, 7 files of length 2, etc.

Tip: use `os.listdir(...)`.