

Life of a Particle : Quiz 2

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Question 1 : GitHub Perform the following steps to create GitHub repository. Feel free to use the internet to search for how to do this if you don't remember.

- Create a GitHub repository using the online interface at github.com - be sure to include a README.md file when you create this repository. Call the repository "quiz4_NAME" where NAME is your name. Remember, *NO SPACES*!
- Clone this repository to your laptop (`git clone`)
- Go into this repository directory (`cd`) and write a file called *mycode.py* that contains some python code. What that code does is not of importance.
- Add this file to the repository for it to be tracked (`git add <filename>`).
- Check the status of the repository to make sure that the file is ready to be uploaded (`git status`)
- Commit these changes to the repository (`git commit -m 'Commit message here'`)
- Push these changes to the external repository on github.com (`git push origin master`)

When you have pushed this and verified that the file you created exists online, you will submit the URL of this repository when replying to the email. If you are successful in this, when solving the rest of the questions, please submit the solutions by adding them to your GitHub repository

Question 2 : Swapping This code will sum the numbers in the list x :

```
x=[2,1,4,3,5,7,4]
sum = 0
for i in range(len(x)):
    sum = sum+x[i]
print 'The sum is : ',sum
```

Given two lists of numbers below, write the code, test it and upload it to the GitHub repository that you have created. This code should calculate the sum of the element-wise product of the two lists x and y . If this is confusing wording, what we want to calculate is

$$Sum = \sum_{i=0}^{N-1} x_i y_i$$

where N is the number of elements in the lists x and y .

```
x=[2,1,4,3,5,7,4]
y=[6,1,0,3,2,-1,8]
```
