Module 1: Project

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MLDS
MACHINE LEARNING
FOR DATA SCIENCE

Step 1

1. Create a new repository in GitHub called “**Numpy Project**” and clone it.
2. Create a new Jupyter notebook inside your new repo.
3. Import the numpy package under the name **np**

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Step 2 - Answer the following questions

4. Create a 3x3 matrix with values ranging from 0 to 8 (★☆☆)
5. What is the output of the following script? (★☆☆)

```
print(sum(range(5),-1))
from numpy import *
print(sum(range(5),-1))
```

6. Is the following expressions true? (★☆☆)

```
np.sqrt(-1) == np.emath.sqrt(-1)
```

7. Create a random vector of size 30 and find the mean value (★☆☆)

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Step 2 - Answer the following questions

8. Multiply a 5x3 matrix by a 3x2 matrix (real matrix product) (★☆☆)
9. Multiply a 5x3 matrix by a 3x2 matrix (real matrix product) (★☆☆)
10. Create a random vector of size 10 and sort it (★★☆)
11. Create random vector of size 100 and replace the maximum value by 0 (★★☆)
12. How to get the diagonal of a dot product? (★★★)

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Step 3

13. Save your notebook
14. Commit and push your notebook
15. Send your GitHub username to utmmlds@gmail.com

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Thanks!

Please send your **GitHub username** to utmmlds@gmail.com