

Assignment#1

The Art of Analytics : Exploring Value from Data

1. Import numpy in your jupyter (collab) :

```
import numpy as npxx (ex: 200068, np68)
```

Here ~~xx~~ = last 2 digits of your roll number.

create a 2D array of dimension 3*3 = $\{[[4, 6, \mathbf{a}], [5, 7, 3], [9, \mathbf{b}, 7]]\}$

Here \mathbf{a} = 2nd last digit of your roll number

and \mathbf{b} = last digit of your roll number

Ex: 200068, a = 6, b = 8

You have to do the following task in through numpy:

1. Create a 2D array of zeros with dimensions 3x4 using numpy?
2. Print the element in the second row and third column of a 2D array using numpy?
3. Find the maximum value in each column of a 2D array using numpy?
4. Calculate the mean value of each row in a 2D array using numpy?
5. Print subarray (your choice of range, should not be single element)

2. Here's a dataset:

[5, 3, 6, \mathbf{a} , 3, 6, 9, \mathbf{b} , 4, 1]

Here \mathbf{a} = 2nd last digit of your roll number

and \mathbf{b} = last digit of your roll number

Ex: 200068, a = 6, b = 8

You have to calculate & show steps (answer it on doc/pdf file):

1. Mean, Median, Mode
2. Interquartile Range
3. Check for outlier

3. Import pandas in your jupyter (collab) :

```
import pandas as pdxx (ex: 200068, pd68)
```

Here ~~xx~~ = last 2 digits of your roll number.

Create a column with names: ['Name', 'Age', 'Roll Number']

4. Any comment on inflation in India compared to rest of the developed countries. You have to answer this using numbers or graphs. Basically you will have to show proper numbers to justify your stand. (Optional)

Instructions: You have to perform Q1 and Q3 in same file. For question 2, you can submit it in same python file as in Q1 & Q3 or you can create a pdf and show the steps there with answers.

