

REC Dr. Chandra Prakash is presenting

```

jupyter 1_1_Introduction_to_Python Last Checkpoint: 3 hours ago (unsaved changes)
File Edit View Insert Cell Kernel Widgets Help Trusted Python 3
In [49]: # array creation
import numpy as np

# Creating array from a list with type float
A = np.array([[1, 2, 4], [5, 8, 7]], dtype = 'float')
print("A : ",A)
# Create a 3X4 array with all zeros. Please note, we have used double paranthesis.
B = np.zeros((3, 4))
print("B : ",B)
# Create an array of complex numbers
C = np.full((3, 3), 6, dtype = 'complex')
print("C : ",C)
# Create an array with random values
np.random.seed(1) # A seed is set to ensure that the results are consistent if you use this

D = np.random.randn(2, 2)
print("D : ",D)
E = np.random.random((2, 2))
print("E : ",E)
F = np.random.randint(3, 15, size=(2, 4))
print("F : ",F)

```

Dr. Chandra Praka... Faiyaz Ahmad (A...)

Prof. Tanvir Ahma... Kamakshi Sharma

Prof. Quamrul Ha... MD YUSUF KHAN

Md Islam Ali Zaid

Abhishek Yadav

JMI-PYTHON-FDP 2020

Peop... (147) Chat

Laranya Lalchandani 11:59 AM +1  
how can we open this file that you have opened sir?

MD YUSUF KHAN 12:00 PM  
On Jupiter platform

Laranya Lalchandani 12:00 PM  
but hoe  
how

37\_Obaid Aslam 12:00 PM  
open jupyter then you will find path for these file #laranya lalchandani

sunita sharma 12:00 PM  
voice breaking

Mohd Nadeem 12:01 PM  
Again voice breaking sir

Aquil Hasan 12:01 PM  
Voice breaking alot

Send a message to everyone

REC Mayank Singh is presenting

Toolkits using Python: NumPy.ipynb

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text RAM 100% Disk 100% Editing

Inspired by:

- <https://colab.research.google.com/github/jakevdp/PythonDataScienceHandbook/blob/master/notebooks/04.00-Introduction-To-Matplotlib.ipynb>
- [https://colab.research.google.com/drive/1NODtO3Y8kApxS5SwMPE2hvdUI3T\\_of4V](https://colab.research.google.com/drive/1NODtO3Y8kApxS5SwMPE2hvdUI3T_of4V)
- <https://colab.research.google.com/drive/1jBce5uounASh20LQPpy5XnjA7ez8xrQr#scrollTo=glluwvY8RjnP>

### Intro to NumPy

[NumPy](#) is the fundamental package for scientific computing in Python. NumPy is used in many other packages in python even though you may not see it explicitly running in your code.

It is a python library that provides a multidimensional array object, various derived objects (such as masked arrays and matrices), and an assortment of routines for fast operations on arrays, including mathematical, logical, shape manipulation, sorting, selecting, I/O, discrete Fourier transforms, basic linear algebra, basic statistical operations, random simulation and much more.

```
import numpy as np
```

### Make an array from a list.

This will create a numpy array with 3 elements.

Each numpy array contains an attribute called shape. Shape is a tuple which tells you how many elements you have per axis. For example (5, 6, 8) means 5 elements per axis 0, 6 elements per axis 1 and 8 elements per axis 2. However you will have only one or two axes

JMI-PYTHON-FDP 2020

People (140) Chat

yes sir

Adarsh Kumar 11:18 AM  
Yes

Tabish Ahmad 11:18 AM  
ok

onib dadgar 11:18 AM  
Yes sir

bhat aadil 11:19 AM  
Yes sir

aslam parwez 11:22 AM  
sir what is the link of numpy tutorial

Faiyaz Ahmad (Assistant Professor, D/o Computer Engineering) 11:22 AM  
What about TPU

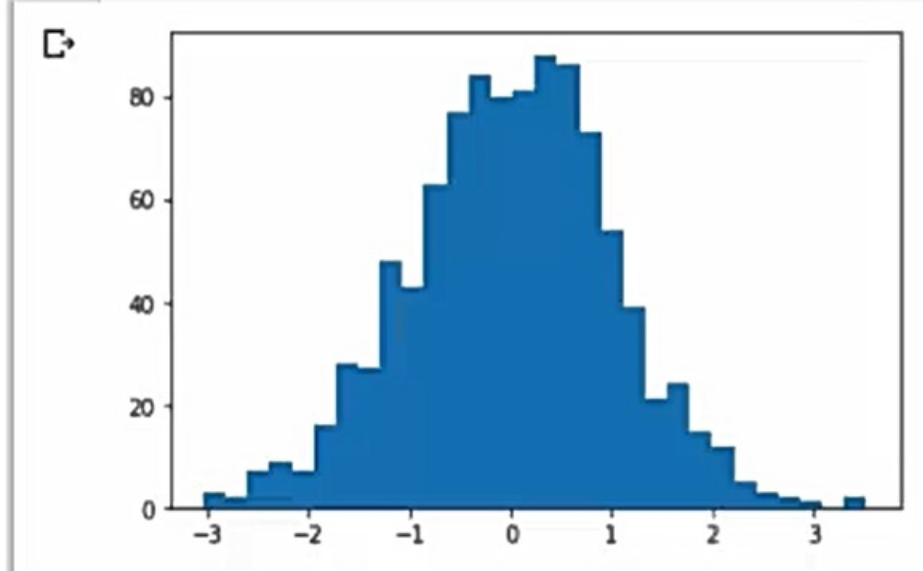
You 11:23 AM  
<https://colab.research.google.com/drive/15GbX0MRRoan5VVzGRXfm2CMmaBFnWDAA?usp=sharing>

Send a message to everyone

Mayank Singh Mohd Nadeem Faiyaz Ahmad ... Prof. Mohamm... onib dadgar Prof. Tanvir Ah... MOHD UVAS 021\_Sneha Tiw...

+ Code + Text

```
import matplotlib.pyplot as plt  
count, bins, ignored = plt.hist(s, 30) # Documentation: https://matplotlib.org/3.3.1/api/\_as\_gen/matplotlib.pyplot
```



```
[ ] count, bins, ignored = plt.hist(s, 30, density=True)
```





Sarfaraz Masood (Assistant Professor, D/O Computer Engineering)



Prof. Tanvir Ahmad (HOD, Computer Engg. / Hony. Addl. Director: Website & MIS)



Prof. Qamrul Hossain (D/O Civil Engineering)



Prof. Ibraheem (Dean, Fro Engg. & Technology)



Shyama Iyer



Fatema Siddiqua