

PYTHON FOR DATA
SCIENCE
Week 2





### **GROUND RULES**

- Come prepared for these sessions by watching the videos.
  - Concepts will be covered in the videos.
  - Hands-On Application will be covered in Mentor Sessions.
- Submit all assignments on time.
- Let's be punctual & respect each others' time.





### DSBA CURRICULUM DESIGN

#### FOUNDATIONS

Python for Data Science (Week-2/4)

Statistical Methods for Decision Making

#### CORE COURSES

**Advanced Statistics** 

**Data Mining** 

**Predictive Modelling** 

Machine Learning

Time Series Forecasting

**Data Visualization** 

#### DOMAIN APPLICATIONS

Financial Risk Analytics

Marketing Retail
Analytics

SQL



# **LEARNING OBJECTIVE OF** THIS MODULE

- Basic Working proficiency in Python
- Basic Data-Manipulation using Python
- Basic Data-Visualization using Python





# POP QUIZ

- Can you name some important Python Libraries
- How to install/uninstall library?
- How to read a dataset?

 Which function is used to get statistical of a Dataframe?

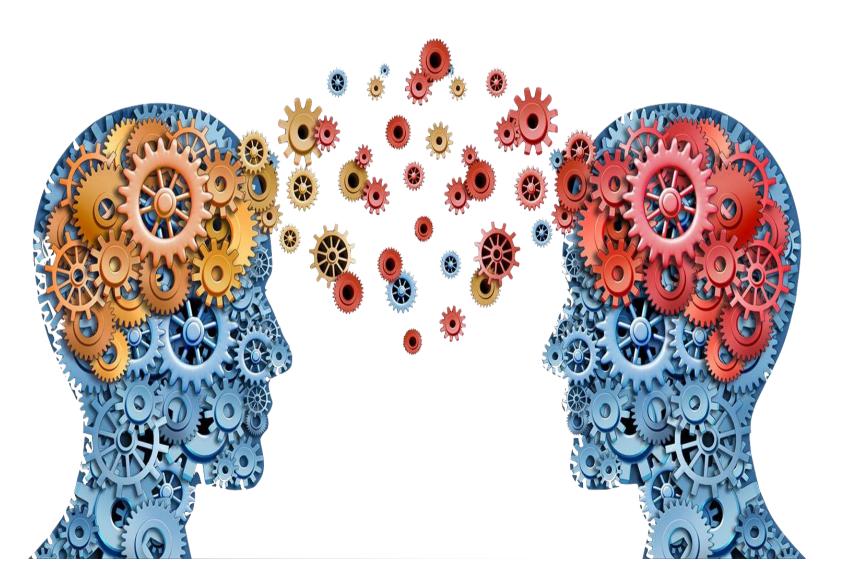




## Let's Learn Together –AUnique Platform for Peer to Peer Learning

#### **Next Week's Theme:**

<u>Data Visualization and It's Real</u> <u>Time/Industry Applications</u>



### Benefits of Peer to Peer Learning:

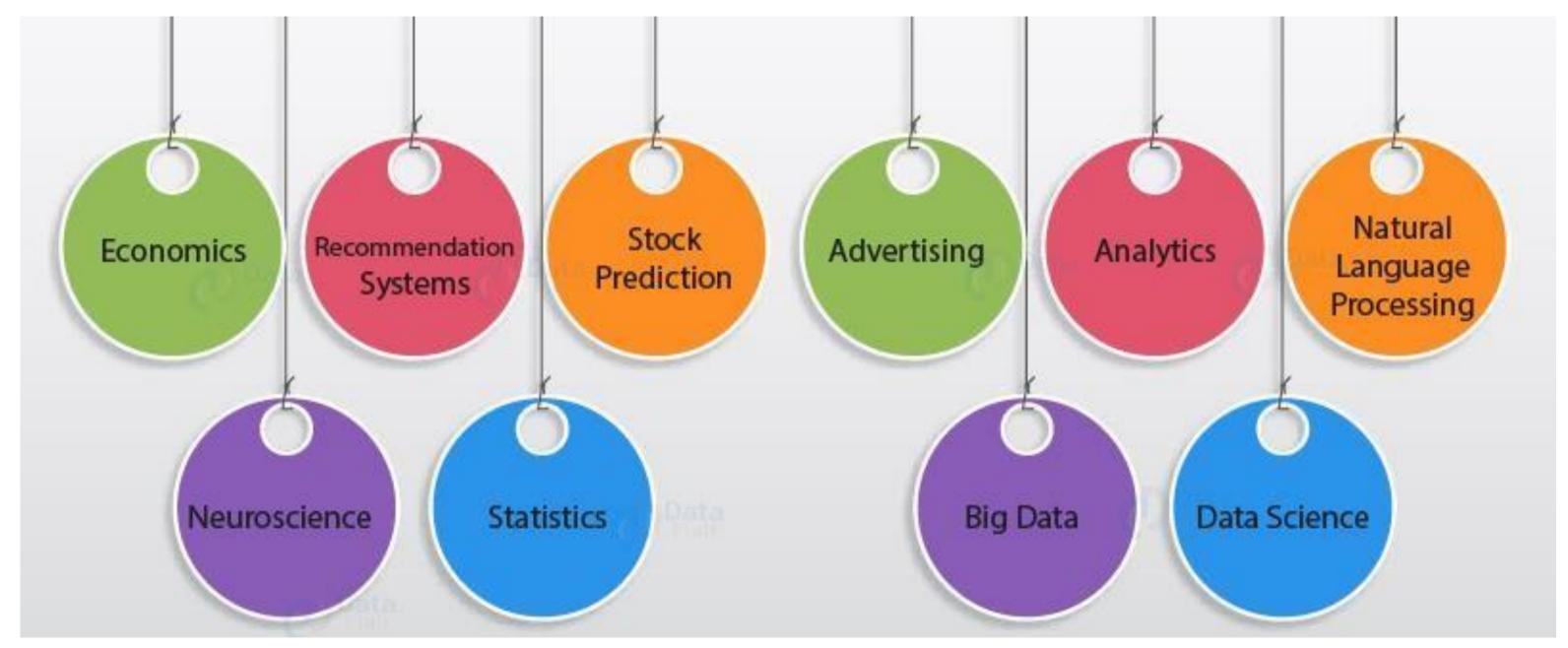
- Active Learning
- Gain a Deeper Understanding
- Feel More Comfortable
- Personalized Learning Experience

# What all can be discussed in a Discussion forum?

- Analytical Concepts
- Issues in Code
- Industry Examples on various analytics concepts
- Software Installation Issues



#### **Industry Examples –Various Real Time Applications of Pandas**



Reference-https://data-flair.training/blogs/applications-of-pandas/



### **CASE STUDY –Forbes– America Top Colleges**

Starting in 2008, every year Forbes Magazine publishes a list of America's best colleges. When it comes to the question everyone seems to be asking, "Is college worth it? this published list of colleges comes handy to take a decision based on student's requirement or desire.

The mission of the college ranking by Forbes Magazine is to conduct an annual review of the undergraduate institutions that deliver the top academics, best experiences, career success and lowest debt. Whether a school is in the Top 10 or near the bottom of the list, the 650 colleges are the best in the country.

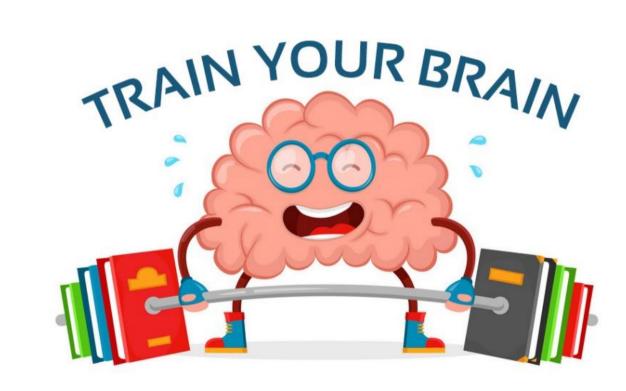
For most families, choosing a four-year college is one of the biggest and most expensive decisions they can make. For students, this time of their life may layout their future plans.

We need to analyze this data to help students make informed decisions.



# How to debug your code:

- 1) Try to debug on your own by <u>reading & understanding the error</u> <u>message</u>- This is an essential step in the learning process.
- 2) Refer to Python Codebooks shared in the Program Overview course.
- 3) <u>Discuss it with the Peers over WhatsApp groups</u>. It will help others in the group understand various nuances of coding.
- 4) Search your problem in Stack Overflow. You are not expected to learn all the codes by heart. Even the experts regularly search for help on Stack Overflow.
- 5) Get your query resolved in the Mentor Sessions or via Program Support feature available in Olympus.







# ANY QUESTIONS



