# Learn Data Engineering & Solve Problems with Python

The Complete Python
Course for Non-Tech and
Tech Professionals



Challenge first approach



Automating Implementation: Python



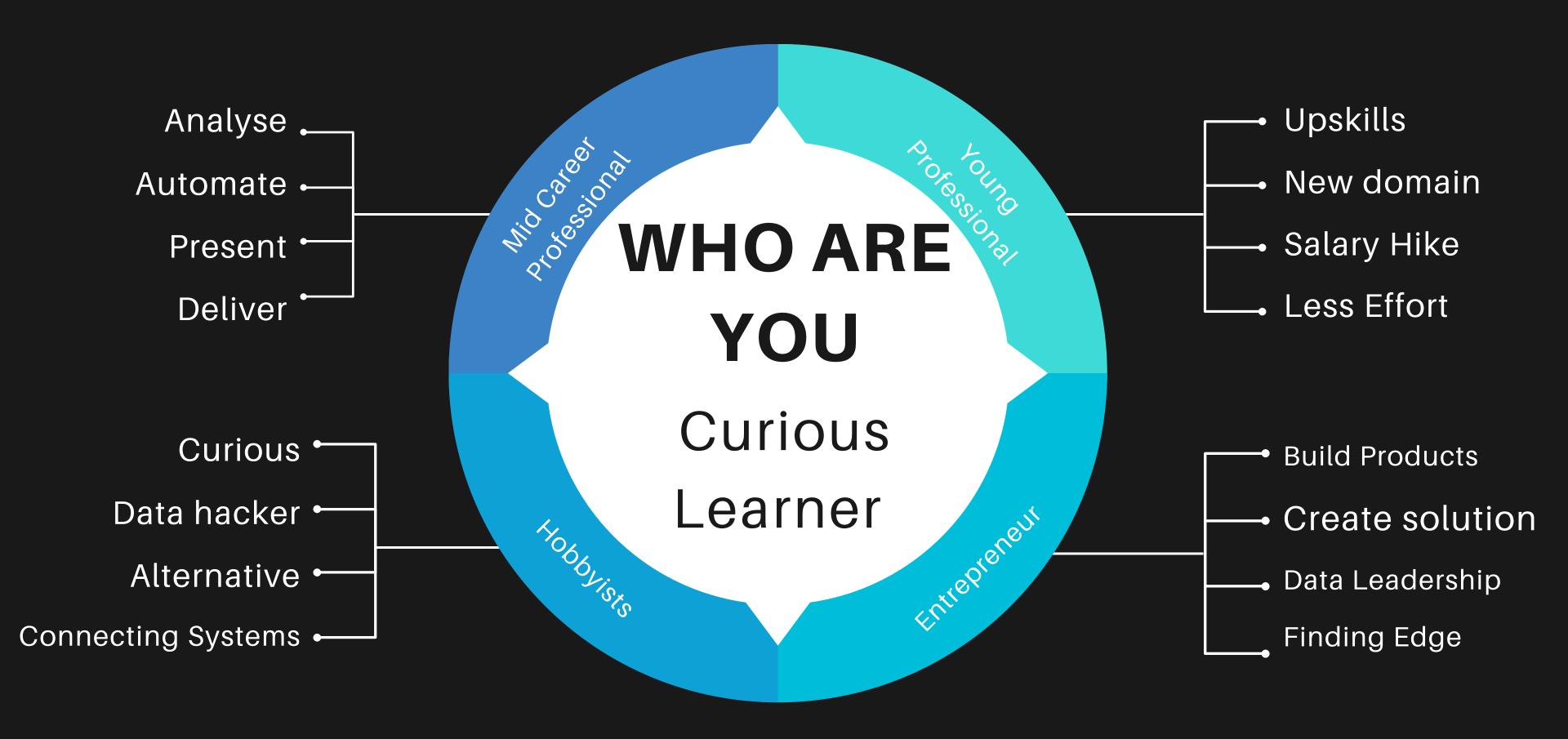
Enabling Big Data & Cloud Computing



Data Pipeline SQL and API development

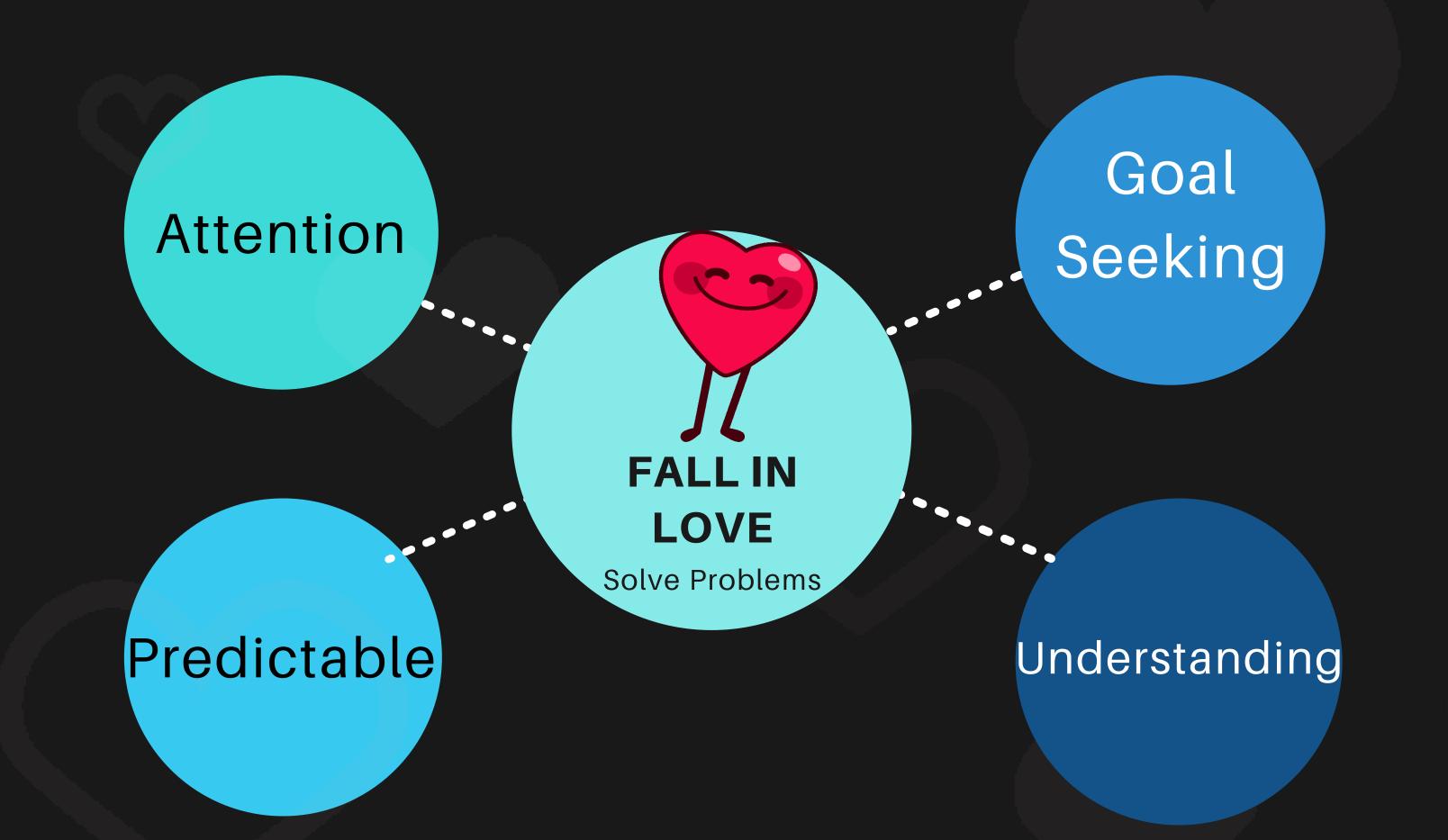


Visualisation and Presentation



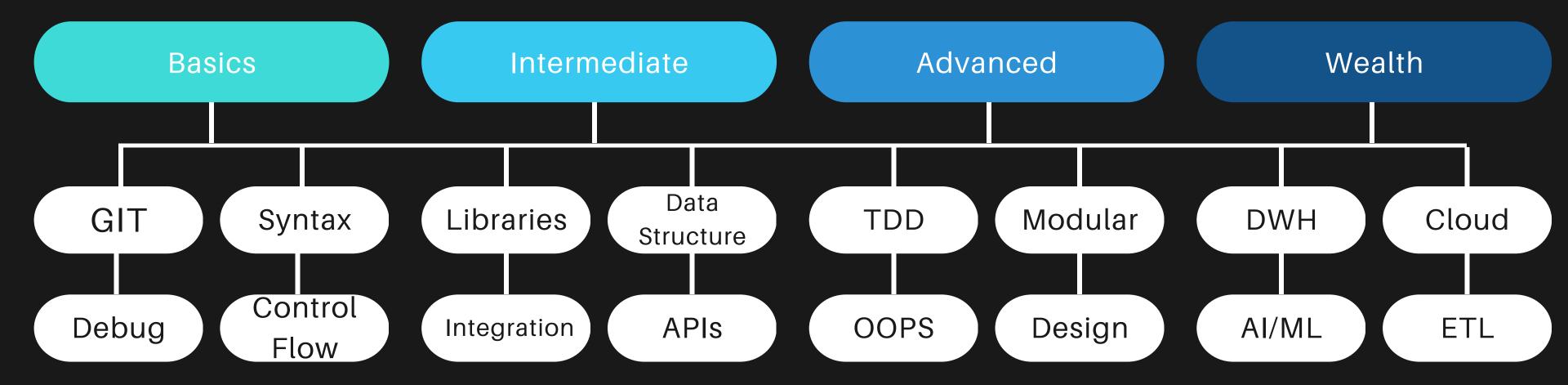


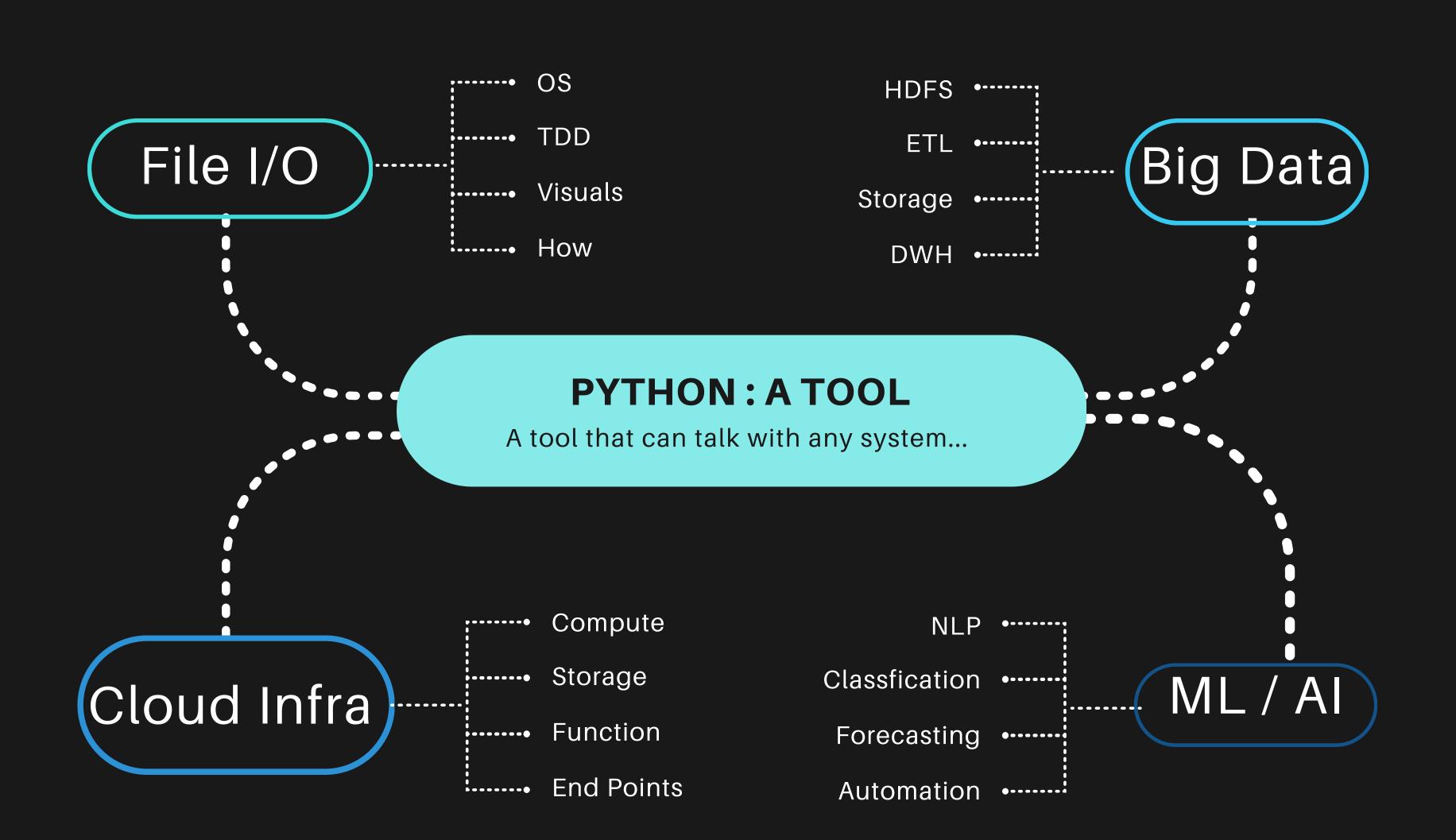
# FALLINLOVE WITHPYTHON& PROGRAMMING



#### **YOUR CHALLENGES**

Learning to Program





### Eights of Python

#### **PYTHON: A DATE**

- 1. Python on Win n Lin
- 2. Setting up Git
- 3. First Program
- 4. Control Freak
- 5. Loopy Python
- 6. Functions + Objects
- 7. Files I/O
- 8. Test Driven Development

#### SQL & PYTHON

- 1. SQL with DBeaver
- 2. Data Modeling Tables
- 3. SparkSQL and PGSQL
- 4. SQL Data Analysis
- 5. CTEs Vs Subquery Vs CTAS
- 6. Modeling Unknowns
- 7. SQL Window Functions
- 8. Data marts Hands on

#### **LIBRARIES**

- 1. Pandas Dataframes
- 2. Psycopg2 Database
- 3. SQLAlchemy ORM
- 4. DBT for Schema Validation
- 5. FastAPI
- 6. Streamlit
- 7. AWS Wrangler
- 8. PySpark

#### LINUX:

- 1. SSH into a Linux Machine
- 2. Using AWK / Cut
- 3. Using SED
- 4. Using Grep
- 5. Configuring SpaceVim
- 6. Using Vim
- 7. Using Tmux
- 8. Shell Scripting A primer

### Eights of BIG DATA

#### DWH: A DATE AWS: A DATE

- 1. Hadoop Cluster: How TO
- 2. File management HDFS
- 3. Hive Query HDFS
- 4. Spark Vs Hive Metastore
- 5. Partitioning in BigData
- 6. Data Analysis in BigData
- 7. Spark Dataframe Stream
- 8. Writing out Data

- 1. Connecting to AWS
- 2. Uploading File to S3
- 3. Reading Files from S3
- 4. Introducing Glue
- 5. Writing schema to Glue
- 6. Introducing Athena
- 7. Querying with Athena
- 8. ETL Projects

#### DOCKER: A DATE DE PROJECTS

- 1. Why Docker
- 2. How Docker
- 3. Which Docker
- 4. Piping Dockers
- 5. Docker in Production
- 6. Dockerfile Vs Compose
- 7. Pipeline with Docker
- 8. Spark and Kafka

- 1. Health Analytics project
- 2. Learners Analytics project
- 3. Customer Analytics pjt
- 4. Marketing Analytics pjt
- 5. Ecommerce Analytics pjt
- 6. Social Media Analytics pjt
- 7. Energy Analytics pjt
- 8. Transportation Analytics

## QUESTIONS

THANKS FOR WATCHING