

**upGrad**

**NoSQL**

**Databases and  
Apache HBase**

**Course :** Data Engineering – I

**Lecture On :** NoSQL  
Databases & Apache HBase

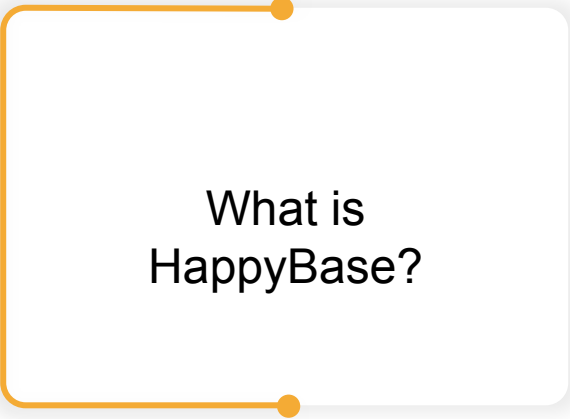
# Session 2

## Programming in HBase

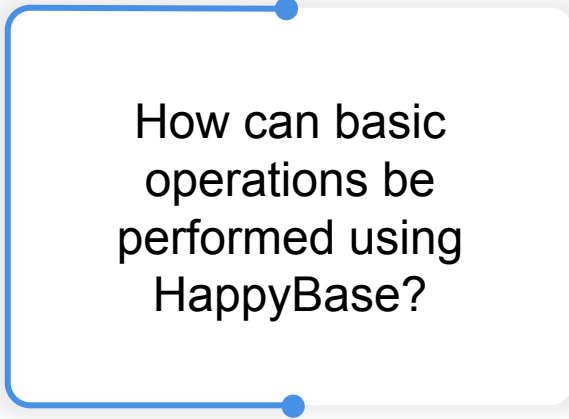
## Segment 2

HappyBase- HBase Python  
API

# LEARNING OBJECTIVES

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What is  
HappyBase?

A white rounded rectangle with a blue border. The border is composed of a vertical line on the left, a horizontal line at the top, and a horizontal line at the bottom, with small blue dots at the top-right and bottom-right corners.

How can basic  
operations be  
performed using  
HappyBase?

# HBASE PYTHON API: HAPPYBASE

- HappyBase is a developer-friendly Python library to interact with Apache HBase.
- HappyBase uses the Python Thrift library to connect to HBase using its Thrift gateway, which is included in the standard HBase 0.9x releases.
- Official Documentation- <https://happybase.readthedocs.io/en/latest/>

# HBASE PYTHON API: HAPPYBASE

- We will be writing Python scripts to perform following operations on HBase:
  - Listing HBase tables
  - Creating an HBase table
  - Inserting data into an HBase table
  - Reading data from an HBase table
  - Scanning all the rows from an HBase table
  - Deleting data from an HBase table
  - Dropping Table from HBase

# USE CASE

The events are flowing in real time on a platform, where events can be of type search, product description page, add to cart, confirmation, etc.

We have to fetch and transform events of user in real time and store it in HBase, which can be later used for analytics.

- Tables
- User
- Events
- Products



Thank You!