

# Machine Learning Using Python

## Day 8: Assignment

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**1. Write a Pandas program to create and display a DataFrame from a specified dictionary data which has the index labels. Sample Python dictionary data and list labels:**

- a. exam\_data = {'name': ['Ankita', 'Dia', 'Kapil', 'Jayesh', 'Esha', 'Mayank', 'Ravi', 'Lata', 'Kamal', 'Jatin'],
- b. 'score': [12.5, 9, 16.5, 15, 9, 20, 14.5, 17.5, 8, 19],
- c. 'attempts': [1, 3, 2, 3, 2, 3, 1, 1, 2, 1],
- d. 'qualify': ['yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes']}

**2. Create a data frame using dictionary.**

- a. Dictionary ('id':[P101,P102,P103,P104,P105], 'Price':[256, 340, 540, 260, 470])
- b. Print the price of product id – p102.
- c. Print values of Price column.
- d. Rename the column id to Product\_Id and Price to Base\_Price.

**3. Create a new data frame with three columns – Product\_Name, Cost, Sales.**

- a. Add 10 values in data frame.
- b. Add a new column named quantity with 10 values.
- c. Add a new column named: Profit and total\_profit and fill values.
- d. Insert a new column named location after Product\_Name column with 10 cities.

(New Delhi, Lucknow, Kolkata, Lucknow, New Delhi, Bengaluru, Chennai, Chennai, Kolkata, Bengaluru)