Q.1 Create a 1D array of numbers from 0 to 9

Q.2 Create a 3×3 numpy array of all True’s

Q.3 Extract all odd numbers from arr

Input:

arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])

Q.4 Replace all odd numbers in arr with -1

Input:

arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])

Q.5 Convert a 1D array to a 2D array with 2 rows

Input:

arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])

Q.NO.1] Define the different ways a DataFrame can be created in pandas?

Q.NO.2] How will you create an empty DataFrame in Pandas?

Q.NO.3] What are the key features of pandas library ?

Q.NO.4] Write a Pandas program to rename columns of a given DataFrame.

Sample data:

Original DataFrame

col1 col2 col3

0 1 4 7

1 2 5 8

2 3 6 9

New DataFrame after renaming columns:

Column1 Column2 Column3

0 1 4 7

1 2 5 8

2 3 6 9

Q.NO.5] Write a Pandas program to convert a dictionary to a Pandas series.

SSample dictionary: d1 = {'a': 100, 'b': 200, 'c':300, 'd':400, 'e':800}

Q.No.1 Cricketer's scores in five ODI matches are as follows:

12, 34, 45, 50, 24.

calculate mean of data using the R and python:

Q.No.2 Write down Difference Between Mean, Median and Mode(with Example).

Q.No.1 Daily Closing Prices of Two Stocks arranged as per returns. So calculate Covariance using R and Formula.

x: 1.8 , 1.5, 2.1 , 2.4 , 0.2

y: 2.5 , 4.3 , 4.5 , 4.1 ,2.2

Q.No.2 Write down Difference Between Covariance and Correlation