

## Create two 2D arrays using array object

- a. Add 2 matrices and print it
- b. Subtract 2 matrices
- c. Multiply the individual elements of matrices
- d. Divide the elements of the matrices
- e. Perform matrix multiplication
- f. Display transpose of the matrix
- g. Sum of diagonal elements of a matrix

```
import numpy as np
ar1=np.array([[1,2],[3,4]])
ar2=np.array([[5,6],[7,8]])
print("Add two Matrices")
print(np.add(ar1,ar2))
print("Subtract two matrices")
print(np.subtract(ar1,ar2))
print("Multiply individual elements of the matrices")
print(np.multiply(ar1,ar2))
print("Divide the elements of the matrices")
print(np.divide(ar1,ar2))
print("Perform matrix Multiplication")
print(np.dot(ar1,ar2))
print("Display the transpose of the matrices")
print(ar1.transpose())
print(ar2.transpose())
print("Sum of diagonal elements of the matrices")
print(np.trace(ar1))
print(np.trace(ar2))
```