Date:24/11/2021

**Program - 1**

**Aim:**

Perform all matrix operations using python (using numpy).

**Program:**

import numpy

x=numpy.array([[2,4],[7,5]])

y=numpy.array([[5,6],[4,7]])

print("Matrix Addition")

print(numpy.add(x,y))

print("Matrix Subraction")

print(numpy.subtract(x,y))

print("Matrix multiplication")

print(numpy.multiply(x,y))

print("Matrix product")

print(numpy.dot(x,y))

print("Matrix square root")

print(numpy.sqrt(x))

print("Matrix divison")

print(numpy.divide(x,y))

print("Matrix sum of element")

print(numpy.sum(x))

print("Matrix sum of elements (x-axis)")

print(numpy.sum(x,axis=0))

print("Matrix Transpose of x")

print(x.T)

**OUTPUT**

