import pandas as pd  
import numpy as np

df1 = pd.DataFrame([[1, 2, 3], [4, 5, 6], [7, 8, 9]])  
df2 = pd.DataFrame([[10, 11, 12], [14, 15, 16], [18, 19, 20]])

df1

0 1 2  
0 1 2 3  
1 4 5 6  
2 7 8 9

df2

0 1 2  
0 10 11 12  
1 14 15 16  
2 18 19 20

df1.T

0 1 2  
0 1 4 7  
1 2 5 8  
2 3 6 9

df2.T

0 1 2  
0 10 14 18  
1 11 15 19  
2 12 16 20

df1+df2

0 1 2  
0 11 13 15  
1 18 20 22  
2 25 27 29

df2-df1

0 1 2  
0 9 9 9  
1 10 10 10  
2 11 11 11

df1\*df2

0 1 2  
0 10 22 36  
1 56 75 96  
2 126 152 180

df1.dot(df2)

0 1 2  
0 92 98 104  
1 218 233 248  
2 344 368 392