Revision Question Day 2:

1- Discuss the role of matrix algebra in data science.
2- Using what operation can you extract 'ith' element from a vector?
3- What vector operations do you need to get mean value of elements of a vector?
4- What are conformable and non-conformable matrices?
5- What is the difference between a dataframe and a matrix?
6- Write yes or no for the following?
      a. We can calculate trace for any matrix.
      b. We can calculate transpose only for diagonal matrix.
      c. $Trace(2*I_n)=2*Trace(I_n)=2$
7- For the following matrices

$$A = \begin{matrix} 1 & 2 \\ -3 & 4 \end{matrix}$$

$$B = \begin{matrix} 0.5 & 1 \\ 1/3 & 7 \end{matrix}$$

What is AB'