Hi,

I have matrix

```
a = [  1  2  3  4  5
      -1 -2 -3 -4 -5
       1  2  3  4  5
      -1 -2 -3 -4 -5 ]
```

and a vector

```
b = [ 10
      20
      30
      40 ]
```

I want to multiply the element in each row of b, to corresponding element in each row and every column of a , i.e.

```
c = [    1*10   2*10   3*10   4*10   5*10
        -1*20  -2*20  -3*20  -4*20  -5*20
         1*30   2*30   3*30   4*30   5*30
        -1*40  -2*40  -3*40  -4*40  -5*40  ]
```

Please tell me the best way to implement this using Matrix multiplication.

Finally, I want to sum the contents of each row i.e.

```
d = [sum(r1,c1:r4,c1)   sum(r1,c2:r4,c2)   sum(r1,c3:r4,c3)
     sum(r1,c4:r4,c4)   sum(r1,c5:r4,c5)]
```

I am currently doing this using element-wise multiplication but that is very slow. I am using Matlab and matrix multiplication will be faster.

I hope that you can suggest a way.

Thanks