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MATLAB
Unit 3-Lecture 6

BTech (CSBS) -Semester VII

29 July 2022, 09:35AM

*few figures/content have been prepared/referred from internet source/books

Question

1) As the functions operate , how can we get an overall result for the matrix? Determine the overall maximum in the matrix?
2) Find the cummulative matrix from (1).
3) For vector *v* with a length *n*, *diff(v)* will be *n-1*. Create a random integer matrix and find difference on each coloumn.
4) Create a matrix of all 10's.
5) Create a vector variable and substract 3 from every element.

Question

6) Create a matrix variable and divide every element by 3.

7) Create a matrix variable and square every element.

8) You are provided with following vector

```
>>vec=[5 9 3 4 6 11]

>>v=[0 1 0 0 1 1]

>>vec(v)
```

Error: Array indices must be positive integers or logical values.

Define this error and give correction for it

Question

9) Find logical true or false of *vec* from (8), for value greater than 9

10) Find same for value less than 9

11) Assume a vector *vec* that erronouesly stores negative values, how can we elliminate those negative values?

12) With same *vec* from (11), using ‘find’ command and logical operators, instead of deleting negative values, retain only the positive values only.

Question

13) When two matrix have same dimension and are square, both array and matrix multiplication can be performed on them. For the following two matrices, perform A.*B, A*B and B*A.

$$A = \begin{bmatrix} 1 & 4 \\ 3 & 3 \end{bmatrix} \text{ and B} = \begin{bmatrix} 1 & 2 \\ -1 & 0 \end{bmatrix}$$