Data605-Week2-Discussion2-kamath

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C25[†] Doing the computations by hand, find the determinant of the matrix below.

$$\begin{bmatrix} 3 & -1 & 4 \\ 2 & 5 & 1 \\ 2 & 0 & 6 \end{bmatrix}$$

Figure 1: Exercise- Determinants - C25

```r
#defining the matrix:
A <- matrix(c(3, 2, 2, -1, 5, 0, 4, 1, 6), 3, 3)
A
```

```
##      [,1] [,2] [,3]
## [1,]    3   -1    4
## [2,]    2    5    1
## [3,]    2    0    6
```

```r
#Doing manually :
(3 *(5*6 - 1*0) ) - ( -1 *(2*6 - 2*1) ) + ( 4 *(2*0 - 2*5))
```

```
## [1] 60
```

```r
#Using R funtion to validate the output:
det(A)
```

```
## [1] 60
```