

```
In [1]: from sympy import*
```

```
In [2]: A=Matrix([[1,0,7],[2,1,6],[3,4,0]])
A
```

```
Out[2]: 
$$\begin{bmatrix} 1 & 0 & 7 \\ 2 & 1 & 6 \\ 3 & 4 & 0 \end{bmatrix}$$

```

```
In [3]: A.det()
```

```
Out[3]: 11
```

Using python program insert row [3,4] in the given matrices

```
In [11]: A=Matrix([[2,5],[-1,4]])
A
```

```
Out[11]: 
$$\begin{bmatrix} 2 & 5 \\ -1 & 4 \end{bmatrix}$$

```

```
In [13]: A.row_insert(1,Matrix([[3,4]]))
```

```
Out[13]: 
$$\begin{bmatrix} 2 & 5 \\ 3 & 4 \\ -1 & 4 \end{bmatrix}$$

```

USing python program delete first row from the given matrix

```
In [19]: A=Matrix([[4,1,0],[7,5,2],[1,-6,2]])
A
A.row_del(1)
A
```

```
Out[19]: 
$$\begin{bmatrix} 4 & 1 & 0 \\ 1 & -6 & 2 \end{bmatrix}$$

```

Using Python program delete second column from the given matrix

```
In [23]: A=Matrix([[9,57,2],[1,2,3],[4,5,6]])
A.col_del(1)
A
```

```
Out[23]: 
$$\begin{bmatrix} 9 & 2 \\ 1 & 3 \\ 4 & 6 \end{bmatrix}$$

```

```
In [ ]:
```