24BMH1112

Rahul LJ

CURL AND DIVERGENCE OF GRADIENT VECTOR FIELD

```
clc

clear all

close all

syms x y z real

F=input( 'enter the vector as i, j and k order in vector form:')

curl_F = curl(F, [x y z])

div_F = divergence(F, [x y z])
```
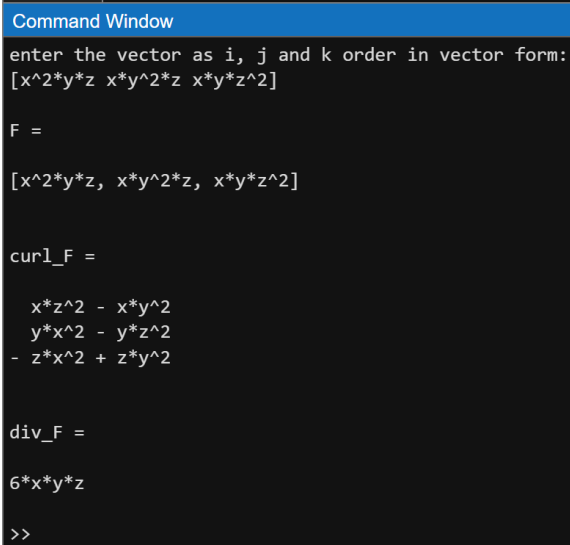
```
Command Window
enter the vector as i, j and k order in vector form:
[x^2*y*z x*y^2*z x*y*z^2]

F =

[x^2*y*z, x*y^2*z, x*y*z^2]


curl_F =

  x*z^2 - x*y^2
  y*x^2 - y*z^2
- z*x^2 + z*y^2


div_F =

6*x*y*z

>>
```