PRACTICAL-12 MCI

#Code

```
Web VPython 3.2
def F(rr):
    return(vector(rr.x**2*rr.y,2*rr.x*rr.z,rr.z**2 - 2*rr.y))


def divF(rr):
    ds = 0.001
    dx = vector(ds,0,0)
    dy = vector(0,ds,0)
    dz = vector(0,0,ds)
    tempx = (F(rr+dx).x-F(rr-dx).x)/(2*ds)
    tempy = (F(rr+dy).y-F(rr-dy).y)/(2*ds)
    tempz = (F(rr+dz).z-F(rr-dz).z)/(2*ds)
    return(tempx+tempy+tempz)

rt=vector(1,2,3)

print("Divergence of Vector"+rt+"is",divF(rt))
```

#Output

```
Divergence of Vector< 1, 2, 3 >is 10
```