

**LAB-10: Finding gradient, divergent, curl and their geometrical interpretation.**

1. Write a python program to find gradient of  $\phi = x^2 yz$ .
2. Write a python program to find divergence of  $\vec{F} = x^2 y\hat{i} + yz^2\hat{j} + x^2 z\hat{k}$ .
3. Write a python program to find curl of  $\vec{F} = xy^2\hat{i} + 2x^2 yz\hat{j} - 3yz^2\hat{k}$ .