

Philip Lydia

17/ENR07/019

Petroleum Engineering

ENR 280 Assignment III

1. Command window-

2. clear

3. clc

4. Syms x y z

5. $F = x^2 * y * z^3 + x * y^2 * z^2$

6. $g = \text{gradient}(F, [x, y, z])$

7. $\text{subs}(g, [x, y, z], [1, 3, 2])$

∴ Therefore gradient $\phi = 8\mathbf{i} + 32\mathbf{j} + 72\mathbf{k}$.