Saransh Vottery 22B0348 B tech in Chemical eng., (1st Year)

## **Progress Report:**

## Week 1 (until 14 May):

Tasks Status

1. Basics of Python Completed

Num. methods(+implementation)

Newton Raphson method
Euler's Method
Jacobi method
Gauss Seidel method
Example notebook
Completed
Completed
Completed
Completed

Implementations of numerical programs

https://colab.research.google.com/drive/1IRV9xepNBDvRlhhfLvsxWCBSogD8-IVS?usp=sharing

Mini Project-1

https://colab.research.google.com/drive/1tPvfwXPgK4ccNHbASaRtrHCsWhZPWWIS

Mini Project-2

https://colab.research.google.com/drive/1yVtJk3GYd3PjtnxXhts6TAHJKXBacwhO?usp=sharing

Mini Project-3

 $\underline{\text{https://colab.research.google.com/drive/1-SnJuwjzddfOobCoyV1ciZ1i BYmt ho?usp=sharin}} \ \underline{\textbf{q}}$ 

Final Project

Topic: Simulation of fluids in different systems

Description: In this project,I will try to simulate fluids in different systems like pipe,cavity etc. by solving the Navier Stokes equation.

Actionable steps:

- 1) Solving the equation by FDM
- 2) Simulating fluid flow in a pipe
- 3) Simulating fluid flow in more complex systems