

**❖INTRODUCTION TO SCIENTIFIC
COMPUTING (ID2090).**

❖ASSIGNMENT 3

- **Name: Yatharath**
- **Roll no.: BS20B039**

➤ ASSUMPTIONS

#1. I have studied about the vaccine pfizer as I found the model described in the task pretty similar to the way this vaccine is stored.

#2. Furthermore, I have decided to keep the slope of the graph to be 3K (3 Kelvin) per 5 hours which would make the total duration for the most of the simulations more than atleast 10 days which is the average span of pfizer.

#3. I have taken random time instances for replenishing the cryogenic liquid, as 1/15 so as to reduce the cost factor.

#4. The Total duration for the vaccine not to be unfit is not going to be fixed how ever it would surely be more than 9-10 days and less than 15 days.

Respected sir, I hereby request you to see the pdf of the google-Collab notebook I have added, it contains the Thermocouple data generated, the Plot, and also the codes, however I have added separate python files for the codes as well.