

# **ME370: ADAMS LAB**

**Department of Mechanical Engineering,  
IIT Bombay**

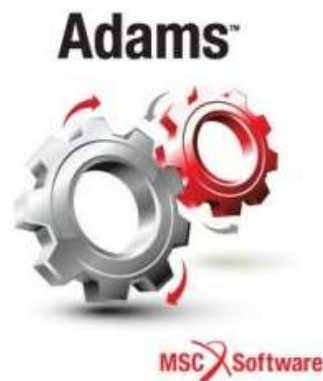


## **Session 4 Report**

**Group / Section: A8**

**Name: Ameya Halarikar**

**Roll Number: 200020023**

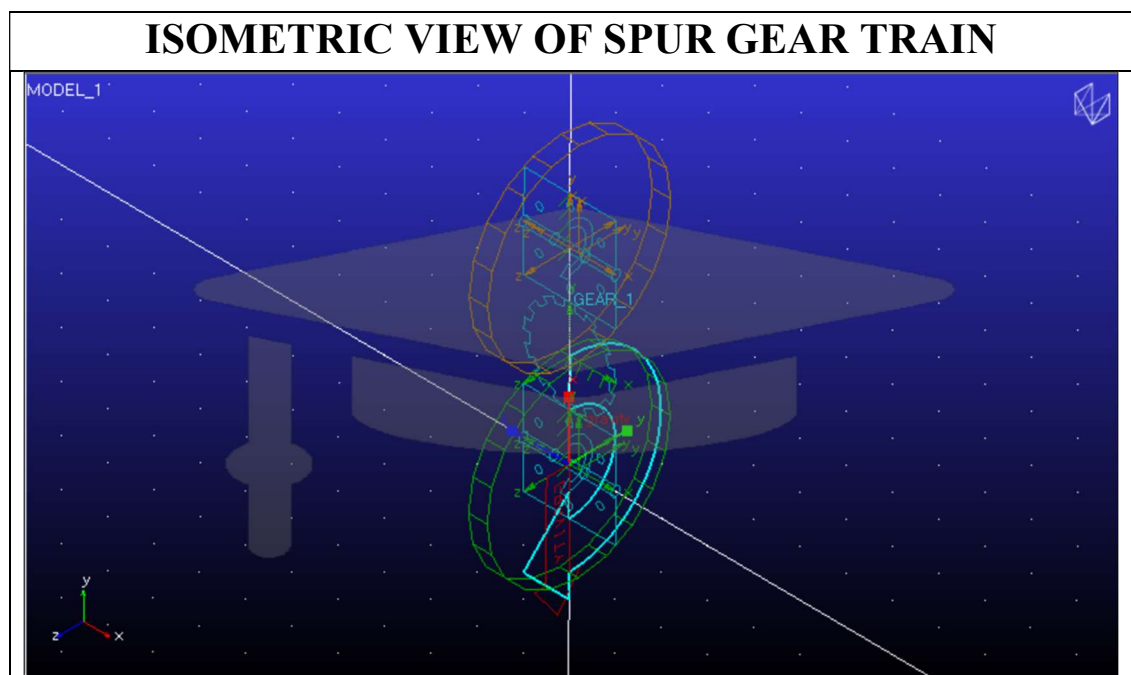


**Date: February 17, 2023**

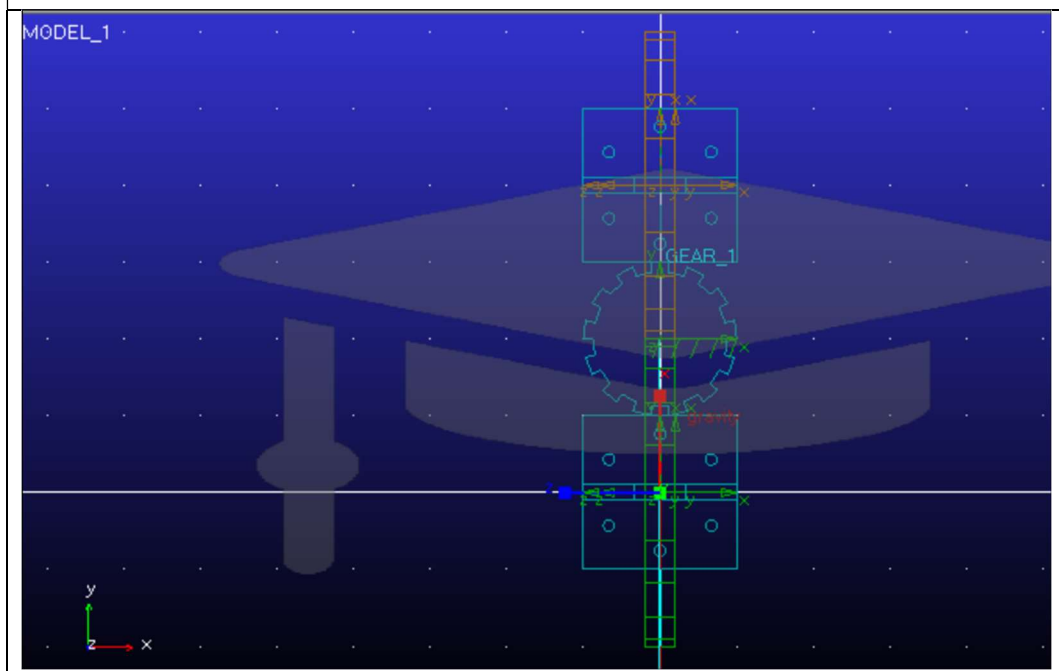
## Given Information

Roll Number	Lengths					
	BE	CE	BF	CF	BG	CG
200020023	182	449	325	313	193	191

## Question 1 (Spur Gear Train)

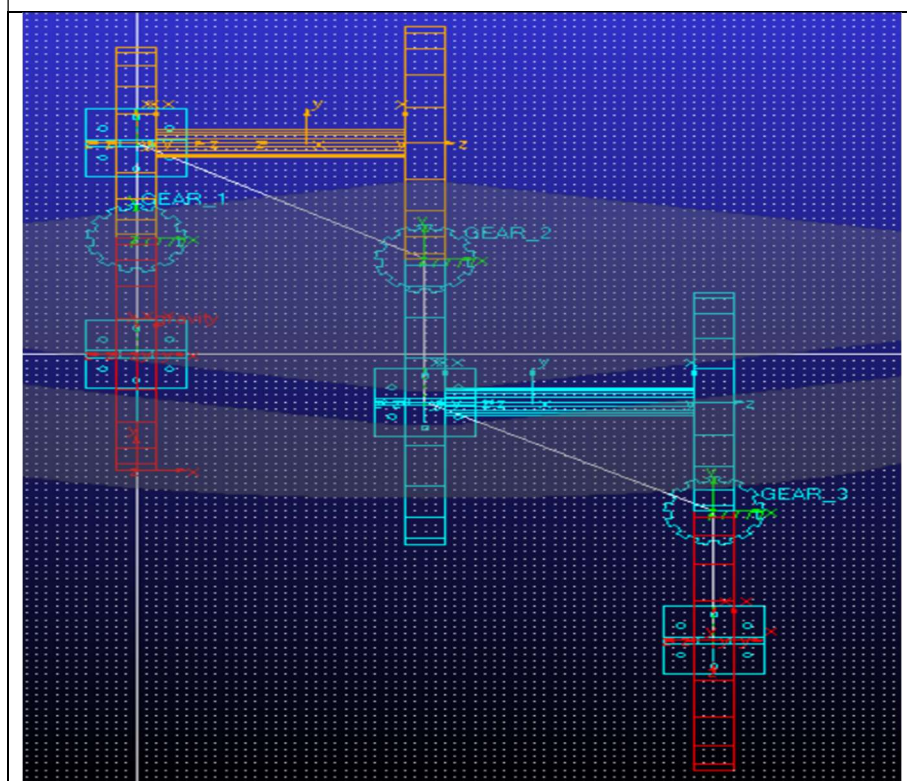


## FRONT VIEW OF SPUR VIEW TRAIN

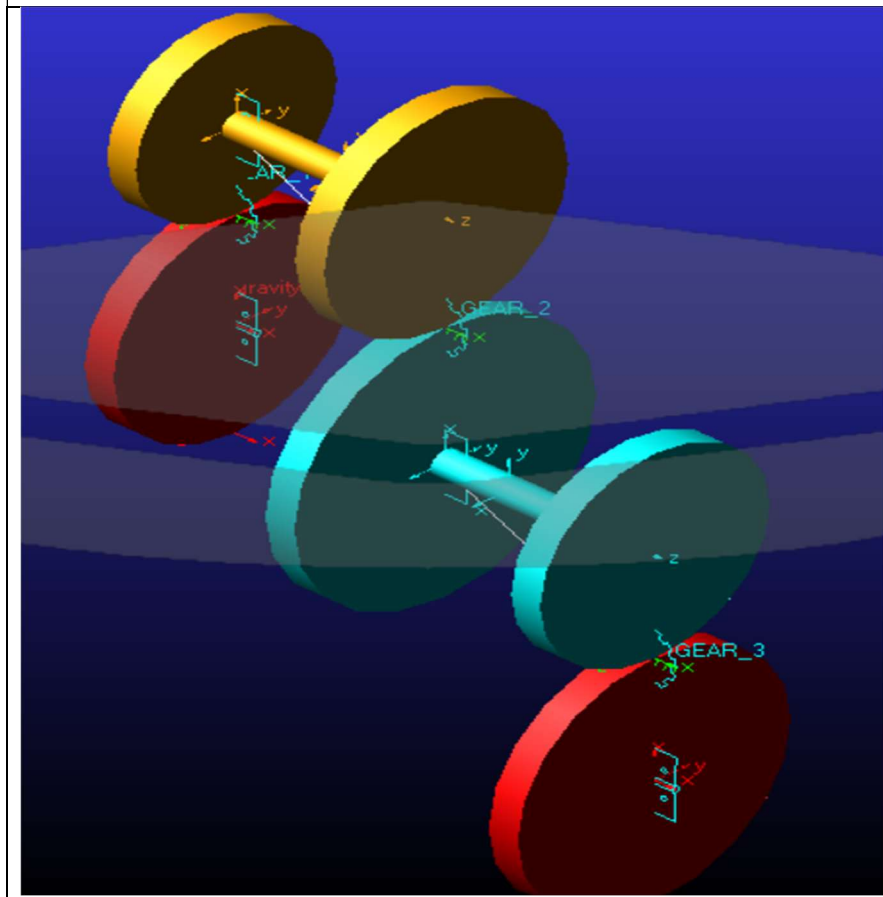


## Question 2 (Multiple Gear Train)

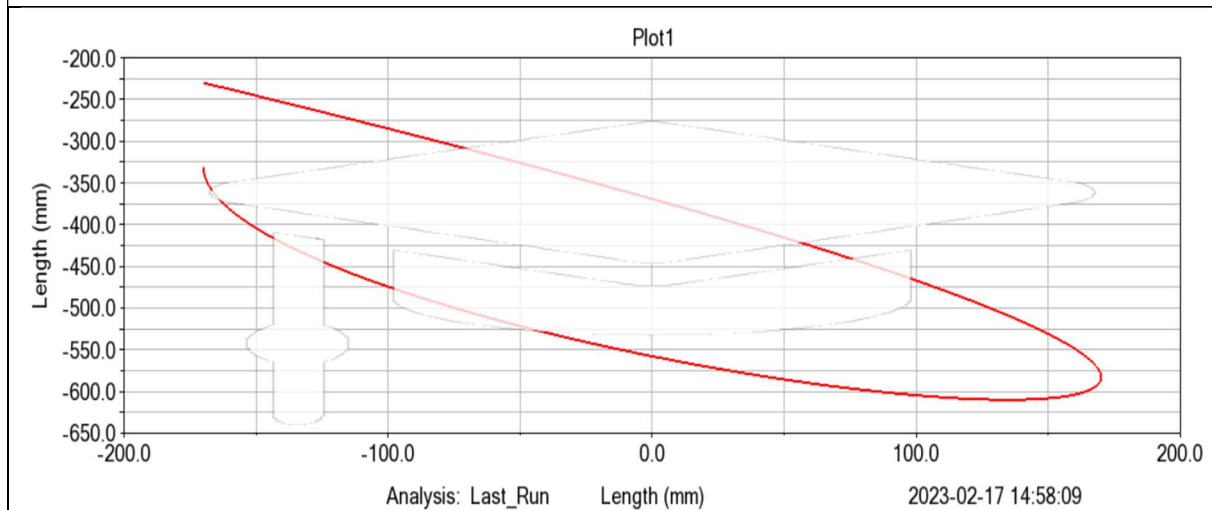
### FRONT VIEW OF MULTIPLE GEAR TRAIN



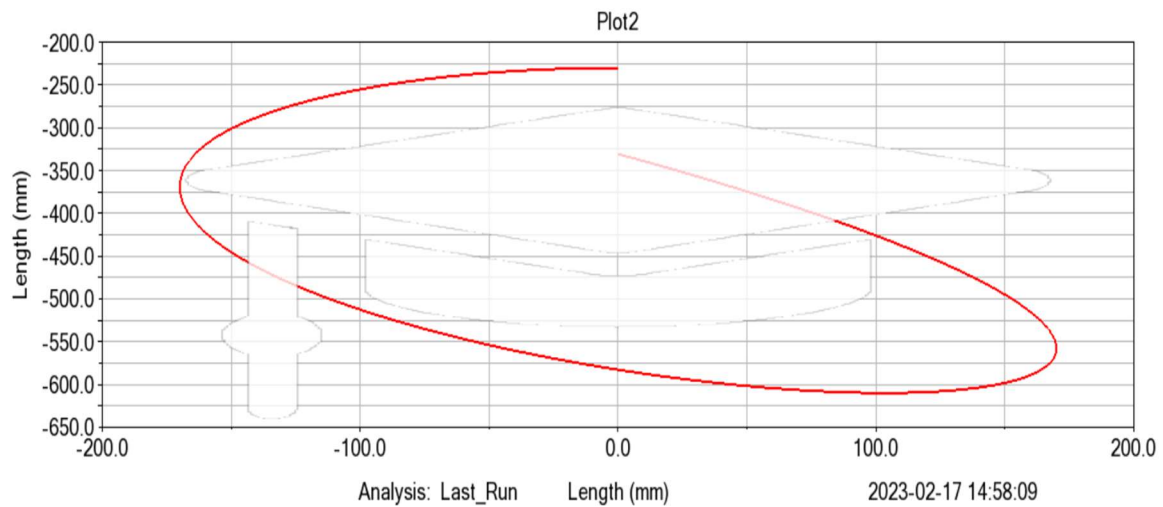
## ISOMETRIC VIEW OF MULTIPLE GEAR TRAIN



## VERTICAL DISPLACEMENT OF F1 VS VERTICAL DISPLACEMENT OF A1

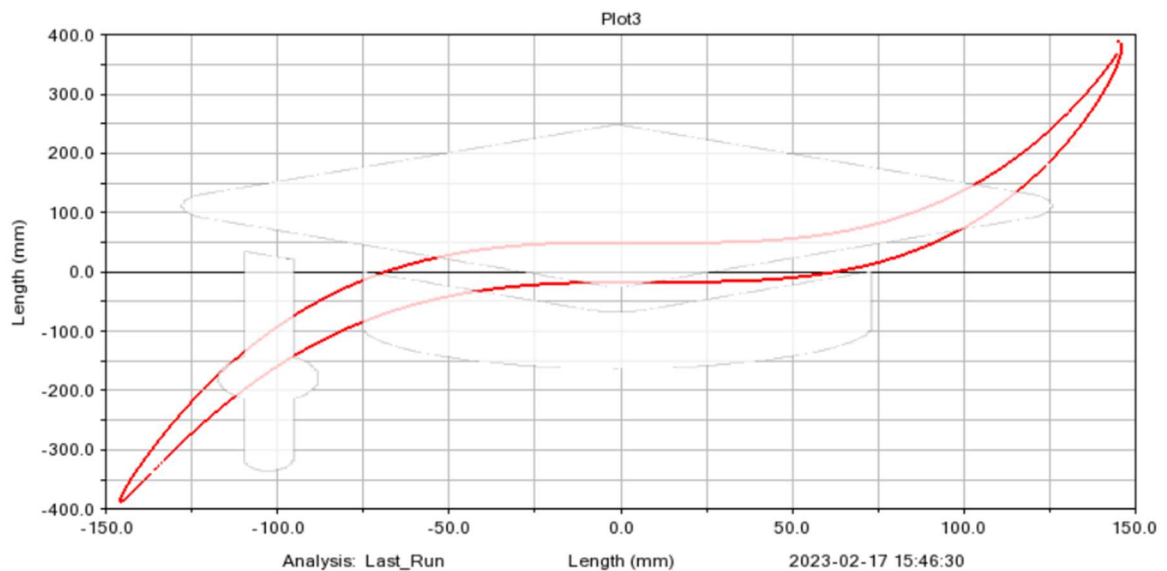


### VERTICAL DISPLACEMENT OF F1 VS HORIZONTAL PLANE DISPLACEMENT OF A1



### Question 3 (Planetary Gear System, Sun Stationary)

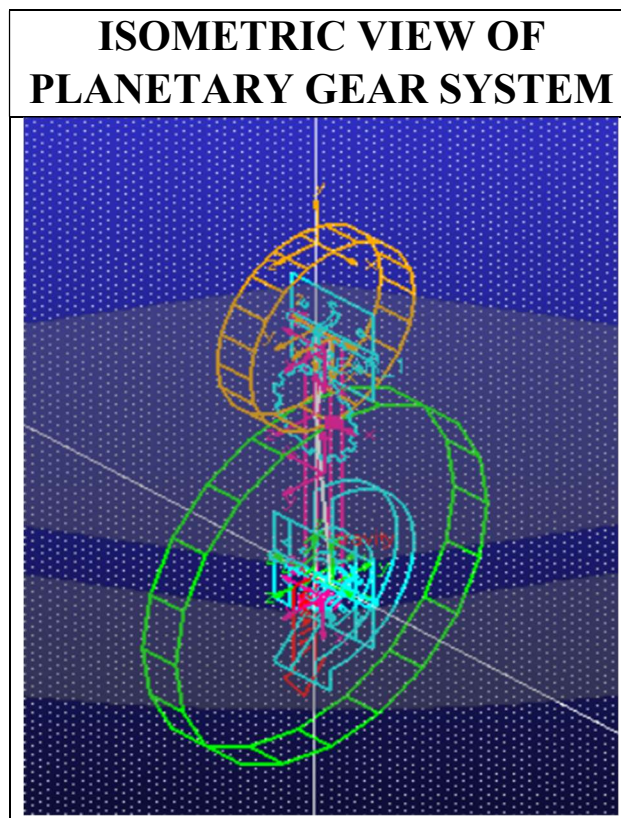
### VERTICAL DISPLACEMENT OF F1 VS VERTICAL DISPLACEMENT OF AR1



## Question 4 (Planetary Gear System, Sun Moving)

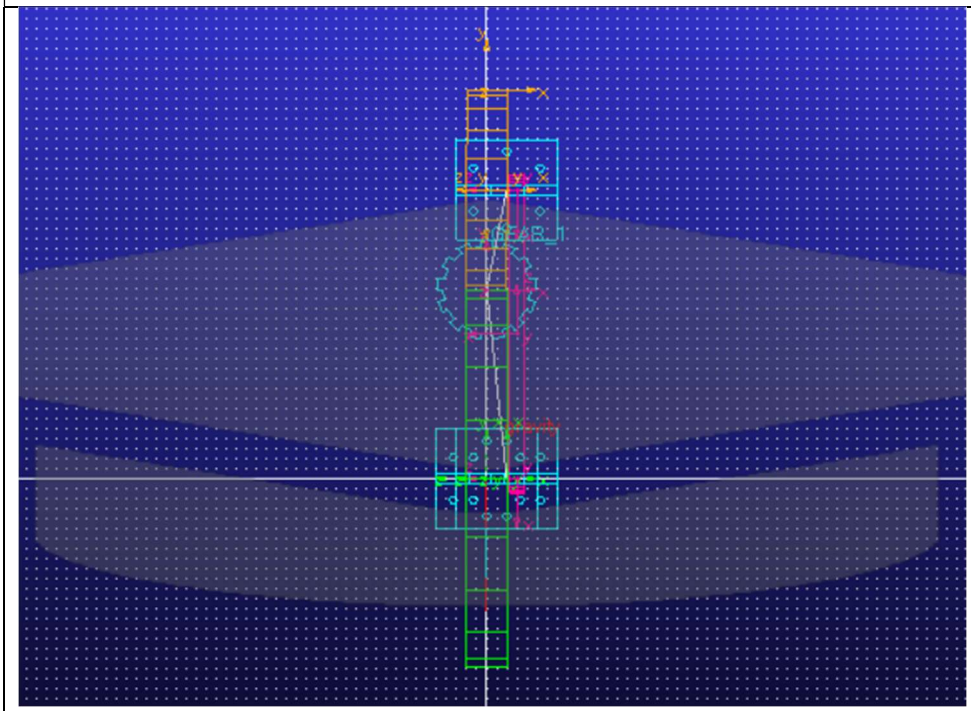
### INPUTS:

- Sun Gear was rotated at 0.5 degrees per second clockwise for 360 seconds.
- Arm was rotated with respect to Sun Gear at 1 degree per second clockwise for 360 seconds.

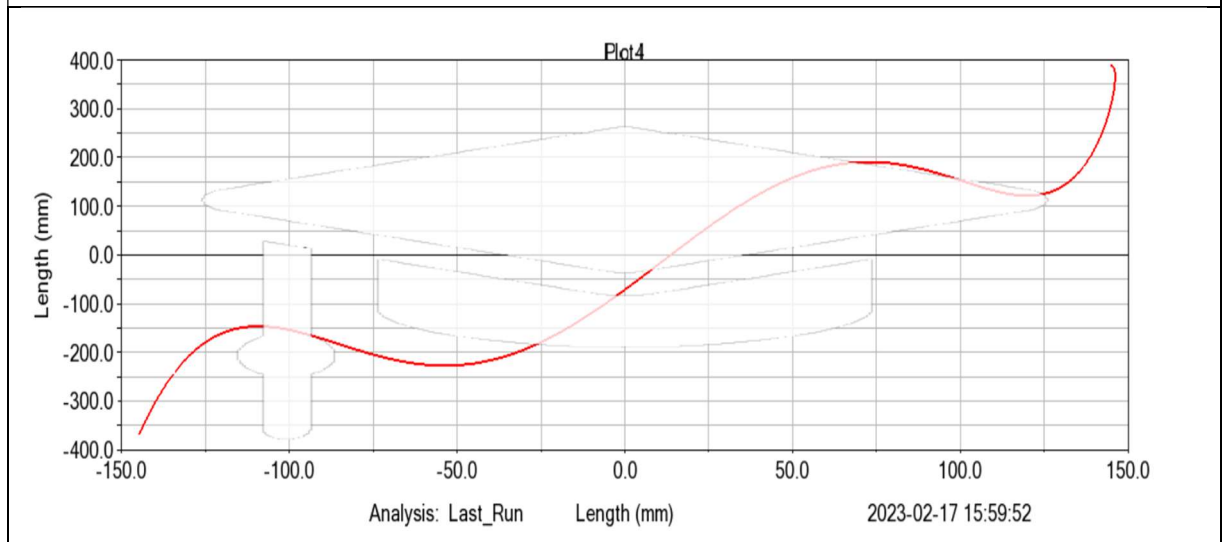




## FRONT VIEW OF PLANETARY GEAR SYSTEM



## VERTICAL DISPLACEMENT OF P1 VS VERTICAL DISPLACEMENT OF S1



—X—X—X—X—X—X—X—X—**END**—X—X—X—X—X—X—X—X—