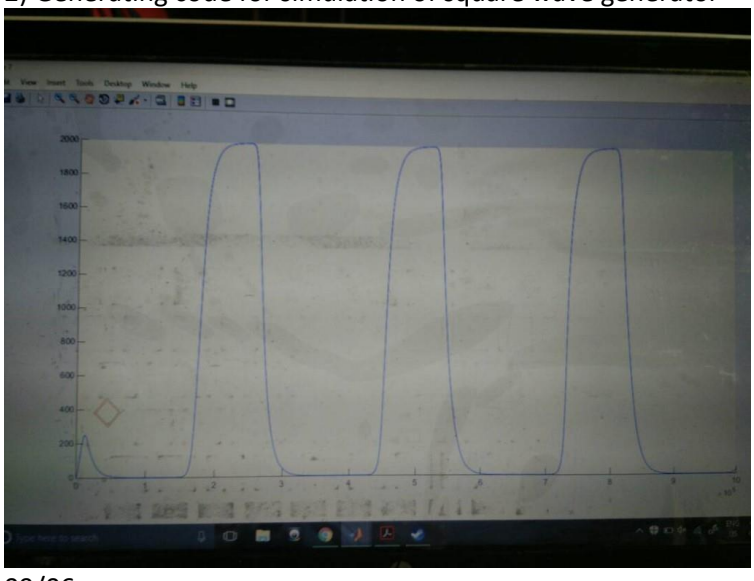
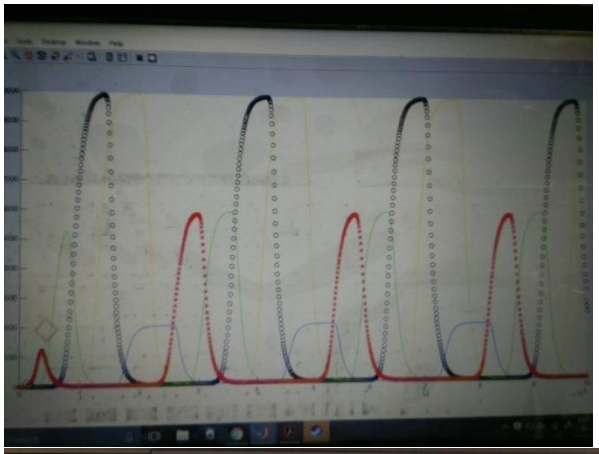
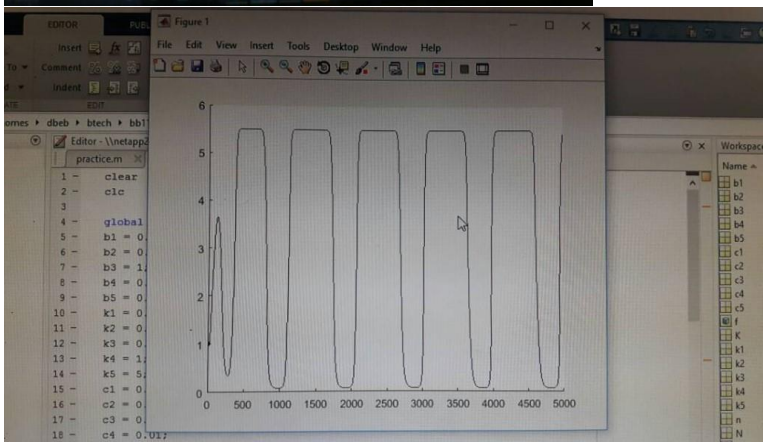
JUNE--
Lab activity:-
Preparation of plasmid isolation solutions
02/06
Discussion on:-
1) Competent cell preparation using chemicals like CaCl2 and electrocompetence
2) Preparation of TSS buffer
3) Functionality of different chemicals present in TSS buffer
4) Transduction using p1 phage; rolling circle process
05/06
Discussion on project idea **"SQUARE WAVE GENERATION IN BACTERIA"**:-
1) Ring oscillator (5 member)
2) Combination of a repressilator and a toggle switch
3) Removal and degradation tags and addition of positive feedback regulation to generate long term synchronized oscillations
4) Biomolecular comparator (double input and output)
5) Chemotactic system analogues
6) Flip flops in genetic circuits
7) Use of Danino circuit in building a square wave generator
8) Toggle switch as a component of repressilator
06/06
Discussion on:-
1) Ways to implement the idea of generation of square waves in a synthetic environment
2) Computational aspect of project on MATLAB
3) LV Models - i. Competitive ii. Symbiotic iii. Predator-prey
4) Simulation of LV Model (Predator-prey) on MATLAB
08/06
Discussion on:-
1) Solving ODEs in MATLAB
2) Generating code for simulation of square wave generator



09/06
Discussion on:-
1) Finding the parameters which affect our generation of square waves
2) Removal of degradation tags and repressors with high co-operativity supported our square wave generation
3) Finding the required parts that could be used in our project





10/06

- Additional safety rules for lab work described
- Isolation of aiiA, BM and LuxI and transformation of the following plasmids

12/06

- Inoculation of LuxI, BM and aiiA

13/06

- Plasmid isolation of LuxI, BM and aiiA
- Restriction digestion of the isolated plasmids and their gel run

14/06

Plans on:-

- Conducting workshops in schools
- Developing PR on social media
- E-mailing every single company on list
- Contacting companies nearby so that we can pitch them up personally

18/06

Discussion on:-

- Marketing strategies
- Ideas on video for crowdfunding
- Increasing social media traffic
- Workshops in schools
- Low copy vectors to be used as our plasmids as they are more reliable

21/06

Emergency Discussion on:

- Ways of conduction of workshops in schools
- iGEM Registration

29/06

- Team logo development
- Cold calling
- Modelling 5-node relaxation oscillator using Voigt's repressors (Phlf, Orf2, Srpr, TetR,BM3R1)
- Collaboration with iGEM Glasgow to receive their parts that could possibly be used in our projects
- Developing an inventory of parts required
- Video development

30/06

- Analysing flaws of video and developing a new & better video
- Further expanding our catalogue of parts
- Discussing marketing strategies
- Running bifurcation analysis of our model of relaxation oscillator