- **Title of project : “** Planar graph All Pair Shortest Path and its variations **”**

- **Team members :** 1) Ankit Mishra (2018201079)
2) Pranjal Patidar (2018201094)

- **Deliverables :** To improve overall performance of “ All Pair Shortest Path ” algorithm .

- **Project delivery plan :** In first week, we will study the different approaches to improve the performance of ‘All Pair Shortest Path’ algoritms, analysing its feasibilty.

In second week, we will implement the heuristics to the standard algorithm, to achieve the significant improvement in performance.

In last week, we will test our implementation against test cases, and check the performance improvement, against standard algoritms.

- **Technologies to be used :** C/C++ , Jupyter Notebook (for report).

- **Online resources :** Research Paper’s –
1)https://www.researchgate.net/publication/315489843_CUDA_Analysis_of_Parallelization_in_Large_Graph_Algorithms

2)https://www.sciencedirect.com/science/article/pii/S0022000097914938

3)http://cs.brown.edu/research/pubs/pdfs/2005/Klein-2005-MSP.pdf

- Repository where work is being committed :
https://github.com/pranjal2018201094/APS_PROJECT

- **Plan for testing :** First we will generate few test cases, and run them once on standard algorithm, and then run the same test case on implemented algorithm, and then check the performance on different aspects.

- **End user documentation :**

- Detailed report will provide information about algorithm heuristics, and its analysis on test cases.
- For user level testing, user can provide input data as edges in file (Each number on new line) and can test if it improves the performance by comparing it’s performance with standard algorithms performance.