**Week Report**

Social network analysis is core module in my Dissertation. StackOverflow, one of the world's largest technical Q&A website, has become a major source for programmers to learn knowledge about computers science. This is because it covers a wide range of programming and computer-related topics. The main idea of the Dissertation could be to analyze the relationship between the behaviors of users on this website and the impact on their interest in computer science, the method is constructing a tag-tag relationship graph on the StackOverflow website. The methodology and idea of the analysis aims to emphasize that the dynamic network constructed compared to traditional static methods.

**The main work:**

1. Data Collection

I need to use the **Stack API** to extract data from the StackExchange website.

Counting the nodes, k and density

1. Network Analysis

Using Barabási-Albert (BA), Configuration model (CM), Erdös–Rényi (ER) and Watts-Strogatz networks to compare with real-world network

3.find community