# ABSTRACT

PROBLEM STATEMENT:

Social network forms a network of social interactions and establish personal relationships between people (i.e., friends, colleagues) based on a common interest. It connects people using a dedicated online application which enables users to communicate with each other and share interest, post comments, send messages, share images and videos.

Social media has made an impact on its users' lives in one way or another. Many active users do not go a day without checking their various social media profiles, uploading content and exploring other user's content, regardless of whether they know them.

Social Networking is a C based project, which allows people to connect with each other. This focuses on building of social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others.

The services provide a collection of various ways for users to interact, such as sending connection requests, messaging, finding the shortest link between two people and much more. The idea is to form individual function to each operation and all the operations are unified together with switch cases. Here we are using graph to represent the social networking system where the people act as vertices.

In this project we are mainly focusing on the decrease and conquer design technique where we use the breadth first s
earch graph traversal algorithm to perform the operations such as finding the all the people at $n^{th}$ level for a given user and finding the shortest link between two people. As we can see many social media applications provide some services such as sharing information and messaging, but here we are adding the above- mentioned features along with some other features which makes it a bit unique.