The aim of this project is to take a user input and provide ten suggestions from a social networking database whom the input may know or would like to be connected with. The project takes into consideration various criteria such as matching of school, workplace, gender and the number of mutual friends and prioritizes them. It then generates an overall score before displaying the top ten results.

The project contains 4 files(besides this). The first is the original data that has been obtained from SNAP (Stanford Network Analysis Project). The data is anonymous and represents undirected social circles. It is provided in the form of lines with each line containing two numbers (numbers here actually represent people) who are friends on Facebook. The second file is the python code to create individual files based on the original data and stores them on the computer for further use. It is observed that the data has been provided of four thousand three hundred and nine people.

Unfortunately, the data obtained from SNAP contains only friend pairs and no other information. To tackle this, a code was written to randomly allocate a school, a college and a workplace from amongst fifty schools, colleges and workplaces (all generalized variables) to all the individual files. Also, gender (male or female) was also randomly allocated to the individual files. This was done keeping in mind the current trend and human psychology of being eager to connect to the people of opposite gender rather than those of the same gender. All this has been done in the third file.

Moving on, the fourth file is the main code that takes a user input number (less than 4309- which is the total number of people on database) and outputs the top ten people recommendations to connect with. We have also displayed the number of mutual friends the suggestions have with the original input. The code works with time complexity O(n2).