**Project 9**

Cryptographic hash functions are very commonly used in password verification. For example, when you use any online website which requires a user login, you enter your E-mail and password to authenticate that the account you are trying to use belongs to you. When the password is entered, a hash of the password is computed which is then sent to the server for verification of the password. The passwords stored on the server are actually computed hash values of the original passwords. This is done to ensure that when the password is sent from client to server, no sniffing is there. Implement this approach.

Please also do the following:

1. Implement a digit-folding approach in the hash function.
2. Assume that, the password are stored in a hash table. Apply a “double hashing” as a collision resolving technique in the open addressing.
3. Draw a class diagram to present the relations between classes.
4. User should be able to interact with your program and provide the input.