**Deify Helman Key Exchange Algorithm**

Approach : Let’s Assume that Alice and Bob are going to communicate now to implement the approach the first thing that we need to do is declare all the variables that we are going to use in the code but for declaration we need to use the datatype as (**long long int ) or (bigint)** for that we need to include their libraries . The reason to use these libraries is to make it more infeasible for outsider to determine the number which will make it harder to break the encryption.

The approach will be executed sequentially which will be as follows.

1. At first, we need to declare and define 2 prime numbers by taking two variables we will do that .
2. Then after that we need to declare and define two private keys variables for Alice and Bob respectively.
3. After that we need to compute the public key values for that we need to use this formula  where the prime number and the private key of Alice will be required to calculate x
4. Similarly, we need to use  formula to compute the public key value of Bob
5. Now the next thing that we need to do is to calculate the secret key for which we need to use this formula  where in Alice’s case we will use the Bob Public key value and in Bob’s case we will use Alice’s 
6. If the value of ka = kb then we can say that Diffie Helman key Exchange Algorithm was implemented successfully.
7. The communication , or information exchange can be done once both the secret key matches.