In [1]:

```
print("IMPLEMENTATION OF DIFFIE-HELLMAN KEY EXCHANGE ALGORITHM\n")
N = int(input("Enter the value of N :"))
G = int(input("Enter the value of G : "))

a = int(input("Enter the private key for Alice: "))
b = int(input("Enter the private key for Bob: "))
x = int(pow(G,a,N))

y = int(pow(G,b,N))
ka = int(pow(y,a,N))
kb = int(pow(x,b,N))
print('Secret key for the Alice is : %d'%(ka))
print('Secret Key for the Bob is : %d\n'%(kb))
```

IMPLEMENTATION OF DIFFIE-HELLMAN KEY EXCHANGE ALGORITHM

Enter the value of N :24
Enter the value of G : 8
Enter the private key for Alice: 5
Enter the private key for Bob: 4
Secret key for the Alice is : 16
Secret Key for the Bob is : 16

In [ ]: