



Aldel Education Trust's

# St. John College of Engineering and Management, Palghar

(A Christian Religious Minority Institution)

Approved by AICTE and DTE, Affiliated to University of Mumbai/MSBTE

St. John Technical Campus, Vevoor, Manor Road, Palghar (E), Dist. Palghar, Maharashtra-401404

**NAAC Accredited with Grade 'A'**



## DEPARTMENT OF COMPUTER ENGINEERING

**Lab code:** CSL602

**Class:** T.E./COMP/A2 & A3

**Course name:** Cryptography & System Security Lab

### EXPERIMENT 3

**Aim:** Implementation of Diffie Hellman Key exchange algorithm [LO2].

#### Theory:

Following points have to be included:

1. What is symmetric key cryptography?
2. Block diagram of Diffie–Hellman key exchange algorithm
3. Description of Diffie–Hellman key exchange algorithm
4. Theoretically solve Diffie–Hellman key exchange algorithm  
*[theoretical result and code attached should match].*

#### Implementation:

Students are required to implement the logic in Java or Python.

#### Conclusion:

The famous key exchange algorithm, i.e., Diffie–Hellman key exchange algorithm/agreement algorithm is studied and implemented, which is used to establish a shared secret between two parties (i.e., Alice and Bob).

**References:** Mention your references here.

#### Viva Questions:

1. Explain the working of Diffie–Hellman key exchange algorithm.
2. Why is Diffie–Hellman key exchange algorithm called an agreement algorithm?
3. What is a primitive root?

#### Faculty In-charge:

Mr. Vivian Lobo