Computer Networking: Security

# Aim:

**(CSE 3752)**

**Experiment 2**

Implementation of AAA server as user authentication and authorization technique for remote access to the network device in computer network using cisco packet tracer.

# Objectives:

1. An overview on AAA (Authentication, Authorization and Accounting) used in secured system.
2. Configuration and verification of remote user authentication on a Cisco router using AAA server based username-password authentication.
3. Configuration and verification of remote user authentication on a Cisco router using AAA server based username-password authentication with SSH.

# Exercises:

1. An AAA configuration given as following. Which login credentials are required when connecting to the console port in this configuration?

|  |
| --- |
| aaa authentication login NO\_AUTH none  line console 0 login authentication NO\_AUTH |

1. State the advantages and disadvantages of AAA server based user authentication process.
2. Compare and contrast **RADIUS** (Remote Authentication Dial In User Service)  
   and **TACACS+** (Terminal Access Controller Access-Control System) protocol.
3. State the significance of the following command in AAA server configuration:

“AAA authentication login default group TACACS+ local”

1. How does SSH works here to protect the message?