

### **First Assignment**

Install the following tools

Wireshark

Packeth (Install this tool after installing Wireshark otherwise some library error will occur)

Analyse Wireshark tool

Create ICMP packet using packeth and analyse it.

### **Second Assignment**

Install XAMPP in windows machine and LAMPP in Linux machines

Implementation of XML as database and data transport.

### **Third Assignment**

Validation of XML files

Implementation of XPath

Implementation of XPath Injection

### **Fourth Assignment**

Cookie Analysis (Transport analysis through Wireshark)

Modification in Cookie

### **Fifth Assignment**

Analyse the IP fragmentation and Reassembly using Wireshark

If possible analyze the IPv6 fragmentation packet with and without PMTUD.

### **Sixth Assignment**

Create the HTTP authentication for session management using the .htaccess

### **Seventh Assignment (optional)**

Analyse and differentiate the New IP header and IP header in Tunnel mode of IPSec.

### **Eighth Assignment**

XSS Implementation.

Prevention of XSS using HTML special characters

### **Ninth Assignment**

SSL protocol Analysis (Algorithm and Key Negotiation)