

# CSE321 Theory Assignment 02

**Research** and **Explore** the fundamental differences between hashed page tables, and inverted page tables by analyzing the following key areas:

- **Hashed Page Table Implementation**
- **Inverted Page Table Mechanisms**

## **Report Requirements:**

Write a comprehensive analysis focusing on the following two key factors:

### **Memory Organization and Structure::**

- **Describe** the memory layout and organization for hashed and inverted page tables.
- **Explain** how virtual-to-physical address translation occurs in each system.
- **Compare** memory overhead and space efficiency between the two approaches.

### **Performance Characteristics:**

- **Discuss** the impact of hash collisions in hashed page tables and search overhead in inverted page tables.
- **Compare** TLB miss handling and page fault processing in both systems.

**Submission guideline:** Can be found in the submission form given below.

Submission link: [Submission](#)

Deadline: **11 September, 11:00 PM**

**(Submission outside the google form will be automatically rejected)**