

Session: 2021 – 2025

**Submitted by:**

Abdul Mateen 2021-CS-190

**Supervised to:**

Sir Laeeq Niazi

Department of Computer Science

**University of Engineering and Technology**

**Lahore Pakistan**

# Task1:

The vector size increases its as new element is added to the vector. The vector doubles its size when It runs out of space.

## Task2

To use singly linked list for tracking browser record we have to use a stack. And it will be a inefficient solution.

# Task9

The Insertion and Lookup for element in unordered Map Is O(1) where in ordered map it takes log(n) times for those operations. Unordered map provides speed over ordered map. We will use ordered map if we need the data in sorted form. We will use ordered map if have less capacity as it does not manages hashing and uses less space.