# Objectives: Lab 07

The purpose of this lab of BTP500 is to familiarize yourself with the linked list concepts and Graphs. By the end of this lab, you should be able to:

* Successfully ran Binary Search Tree traversal algorithm using linked list.

# Explore the linked list options for Binary Search Tree in C++.

1. Write a C++ program to create a Binary Search Tree with template class to handle the following datasets string data, integer data and decimal data.
   1. **String data:**
2. Milton, Ajax, Clarington, Brock,Oshawa,Pickering,Uxbridge,Whitby,Burlington, Oakville,Brampton,Caledon,Mississauga,Aurora,Georgina
   1. **Integer data:** 95,301,501,801,90,70,80,25,67,89,11
   2. **Decimal data:** 84.8,103.5,67.8,90.3,23.5,67.1,44.5,89.2,100.5,300.2
3. In the same C++ program, ask for 3 options to do the 3 types of traversals algorithms.
   1. Preorder Tree Traversal
   2. In order Tree Traversal
   3. Post order Tree Traversal
4. Paste the screenshots of each of the 3 types of data for each of the 3 types of traversals.

A screenshot of a computer

Description automatically generated

LAB 07 – SUBMISSION

# **2 files.**

# **1.   Word document BTP500-LAB7-NAME.DOCX filled with screenshots of each of the 3 types of data for each of the 3 types of traversals.**

# **2.   BTP500-LAB7-STUDENTNAME-BST-Traversals.cpp**

Do not submit a .zip or RAR file.