#### **BACHELOR OF ENGINEERING**

# BRANCH: ELECTRONICS AND COMMUNICATION ENGINEERING

of Anna University



**DECEMBER 2022** 

### **PSG COLLEGE OF TECHNOLOGY**

(Autonomous Institution)

**COIMBATORE – 641 004** 

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#### 19L305- DATA STRUCTURES AND ALGORITHMS

## SAMPLE OF MONITORING AND GENERTAING BILL FOR SUBSIDIZE INTERNET SERVICES

Bonafide record of work done by

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Faculty guide

#### **ABSTRACT:**

This project focuses on monitoring free internet services and generating bill for the particular customer through the portal. Data structure: TREE is used. Python is used to implement the code and additional we create a GUI (Graphical User Interface) using Tkinter module.

# SAMPLE OF MONITORING AND GENERTAING BILL FOR SUBSIDIZE INTERNET SERVICES:

#### **NEED FOR THE WORK:**

This project focuses on reducing the complexity to generate the bill and also it helps to monitoring the data used by each customer as well as data used by particular area and revenue by earned through this to the government.

#### <u>Data structure used – TREE</u>

- ❖ It consists of a central node, structural nodes, and sub-nodes, which are connected via edges.
- ❖ The data in a tree are not stored in a sequential manner i.e, they are not stored linearly.
- ❖ Instead, they are arranged on multiple levels or we can say it is a hierarchical structure

### Language used - Python

### **GUI** using **Tkinter**

Finally, we incorporate our main code in a GUI that was created using Tkinter module. Tkinter is the standard library for python. Python when combined with Tkinter provides a fast and easy way to create GUI applications.