

**KIET Group of Institutions, Ghaziabad**

***COMPUTER SCIENCE AND INFORMATION TECHNOLOGY***

**PROJECT BASED LEARNING**

**on**

**PHONEBOOK MANAGEMENT SYSTEM**

**SUBJECT: DATA STRUCTURES USING C LAB**

**(KCS-301)**

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**Aim:** To make a phonebook management system

**Objective:** To use to doubly linked list, heap and tree data structures to achieve the aim.

**Abstract:** The primary features that make up the main menu of this Phonebook program include adding new records, listing them, altering and updating them, searching for stored contacts, and deleting phonebook data.

When adding a record to the Phonebook, personal information such as name, gender, father's name, phone number, citizenship number, email, and address is requested. Modifying, listing, searching for, and removing these records is then possible**.**

**Basic principle:** The file handling method and data structure are utilized for storing data and performing the basic phonebook operations in this application**.**

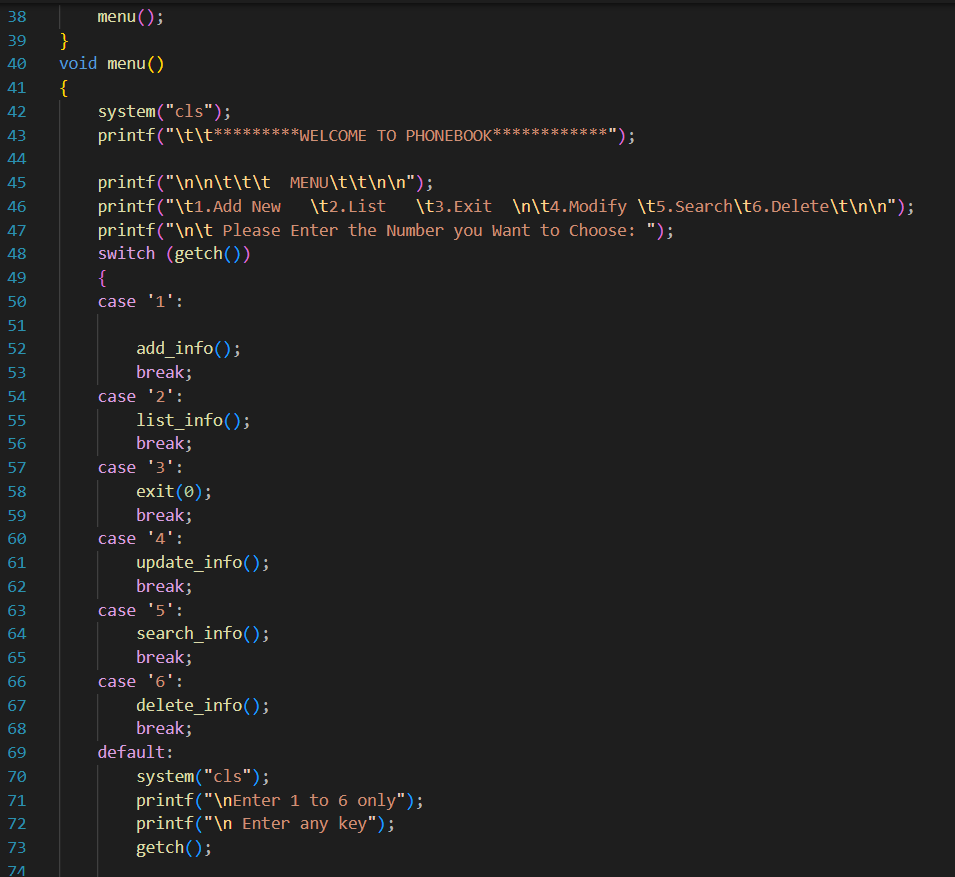
**Methodology:** To use data structure to store phonebook data and display data.

# Flowchart:

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# CODING IMPLEMENTATION:

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# RESULT / OUTPUT

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**TIME COMPLEXITY:** O(n)

# SPACE COMPLEXITY: O(1)