**Assignment 1B**

**Roll No: 33221**

**Class: TE-10**

**Batch: L-10**

**Problem statement**

Write a program to implement an address book with options given below: a) Create address book. b) View address book. c) Insert a record. d) Delete a record. e) Modify a record. f) Exit

**What is shell programming?**

A shell is special user program which provide an interface to user to use operating system services. Shell accepts human readable commands from user and convert them into something which kernel can understand. It is a command language interpreter that execute commands read from input devices such as keyboards or from files. The shell gets started when the user logs in or start the terminal.

Shell is broadly classified into two categories –

**1] Command Line Shell**

Shell can be accessed by user using a command line interface. A special program called Terminal in Linux/macOS or Command Prompt in Windows OS is provided to type in the human readable commands such as “cat”, “ls” etc. and then it is being execute. The result is then displayed on the terminal to the user.

**2] Graphical Shells**

Graphical shells provide means for manipulating programs based on graphical user interface (GUI), by allowing for operations such as opening, closing, moving and resizing windows, as well as switching focus between windows. Window OS or Ubuntu OS can be considered as good example which provide GUI to user for interacting with program. User do not need to type in command for every actions.

**There are many reasons to write shell scripts –**

* To avoid repetitive work and automation
* System admins use shell scripting for routine backups
* System monitoring
* Adding new functionality to the shell etc.

**Advantages of shell scripts**

* Writing shell scripts are much quicker
* Quick start
* Interactive debugging etc.

**Disadvantages of shell scripts**

* Prone to costly errors, a single mistake can change the command which might be harmful
* Slow execution speed
* Design flaws within the language syntax or implementation
* Not well suited for large and complex task
* Provide minimal data structure unlike other scripting languages, etc.

**Address Book Creation Program**

**Text

Description automatically generated**A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generated with medium confidenceA screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generated

**Conclusion**

Address Book created successfully using shell programming.