

1. Database Class:

- **addRecords:** Allows the user to add student records to the file.
- **readRecords:** Reads and displays all records from the file.
- **searchRecords:** Searches for a student record based on the student ID.
- **deleteRecords:** Deletes a student record based on the student name.
- **updateRecords:** Updates the marks of a student based on the student name.
- **clear:** Clears all records from the file.

2. Filehandling Class (main class):

- Creates an instance of the **Database** class (**f**).
- Presents a menu to the user with options to perform different operations on student records.
- Reads the user's choice and invokes the corresponding method from the **Database** class.

3. Menu Options:

- **1: Add Records:** Adds student records to the file.
- **2: Display Records:** Displays all student records from the file.
- **3: Clear All Records:** Clears all records from the file.
- **4: Search Records:** Searches for a student record based on the student ID.
- **5: Delete Records:** Deletes a student record based on the student name.
- **6: Update Records:** Updates the marks of a student based on the student name.
- **7: Exit:** Exits the program.

4. Infinite Loop:

- The program runs in an infinite loop until the user chooses to exit (option 7).

5. Exception Handling:

- The program handles **FileNotFoundException** in case the file is not found.

Note: The program uses a simple text file (**sample.txt**) to store student records. Make sure the file is present in the correct location before running the program. Additionally, there's a potential issue with the way the program updates records, as it involves file deletion and renaming. It's recommended to use a more straightforward approach, such as reading all records, updating in memory, and then writing back to the file.