

**APPLICATION EXECUTION:** The program uses **Java 17** so **JDK/JRE** must be on that level.

The program can be run after unzipping the code and opening the java directory in a command line using **cd** command:

Linux/macOS: `cd code/src/main/java`

Windows: `cd code\src\main\java`

All the below command must be run inside java directory

Then compiling using **javac** command:

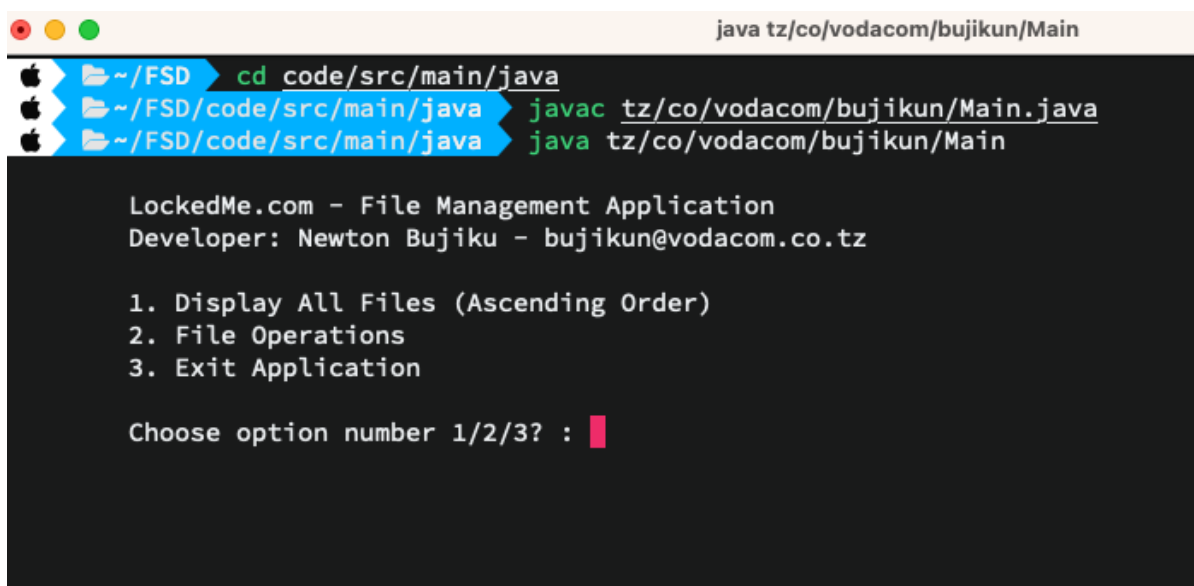
Linux/macOS: `javac tz/co/vodacom/bujikun/Main.java`

Windows: `javac tz\co\vodacom\bujikun\Main.java`

Then execution using **java** command:

Linux/macOS: `java tz/co/vodacom/bujikun/Main`

Windows: `java tz\co\vodacom\bujikun\Main`



```
java tz/co/vodacom/bujikun/Main
~/FSD > cd code/src/main/java
~/FSD/code/src/main/java > javac tz/co/vodacom/bujikun/Main.java
~/FSD/code/src/main/java > java tz/co/vodacom/bujikun/Main

LockedMe.com - File Management Application
Developer: Newton Bujiku - bujikun@vodacom.co.tz

1. Display All Files (Ascending Order)
2. File Operations
3. Exit Application

Choose option number 1/2/3? : █
```

## 1.Displaying files

When the program launches, it will create 2 files in the root directory which can be found from the location where the app was launched from. These can be viewed by choosing 1 from the main menu.

```
java tz/co/vodacom/bujikun/Main

~/FSD ➔ cd code/src/main/java
~/FSD/code/src/main/java ➔ javac tz/co/vodacom/bujikun/Main.java
~/FSD/code/src/main/java ➔ java tz/co/vodacom/bujikun/Main

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1. Display All Files (Ascending Order)
2. File Operations
3. Exit Application

Choose option number 1/2/3? : 1

ROOT DIRECTORY: /Users/newtonbujiku/FSD/code/src/main/java/root
Available Files:

1. file-0@autogenerated.txt
2. file-1@autogenerated.txt

Enter * to go back to main menu: *
```

The program will also create additional files if launched with command line options like below

```
java tz/co/vodacom/bujikun/Main custom-user-file anotherfile file.txt oop.docx

~/FSD/code/src/main/java ➔ java tz/co/vodacom/bujikun/Main custom-user-file anotherfile file.txt oop.docx

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1. Display All Files (Ascending Order)
2. File Operations
3. Exit Application

Choose option number 1/2/3? : 1

ROOT DIRECTORY: /Users/newtonbujiku/FSD/code/src/main/java/root
Available Files:

1. anotherfile
2. custom-user-file
3. file-0@autogenerated.txt
4. file-1@autogenerated.txt
5. file.txt
6. oop.docx

Enter * to go back to main menu: *
```

## Navigation

The application uses \* for navigation through various application part. Any attempt to create a file containing \* will be ignored. If a file containing \* is created manually in the root directory, it will be deleted by a watcher thread.

### 2.a Creating a new file

All user entered valid file names will be created as files in the root directory. When a file is created successfully the application will print a success message and list all file and go back to file operations menu. If the file was not created an error message will be printed.

```
java tz/co/vodacom/bujiku/Main custom-user-file anotherfile file.txt oop

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1. Display All Files (Ascending Order)
2. File Operations
3. Exit Application

Choose option number 1/2/3? : 2

2. File Operations
  a. Create a new file
  b. Delete a file
  c. Search a file
  d. Search a file by character sequence
  *. Back To Main Screen

Choose an option a/b/c/d/*?: a
2a. File Creation

Enter file name or * to go back: file-created-from-user-input.txt

File successfully created: root/file-created-from-user-input.txt

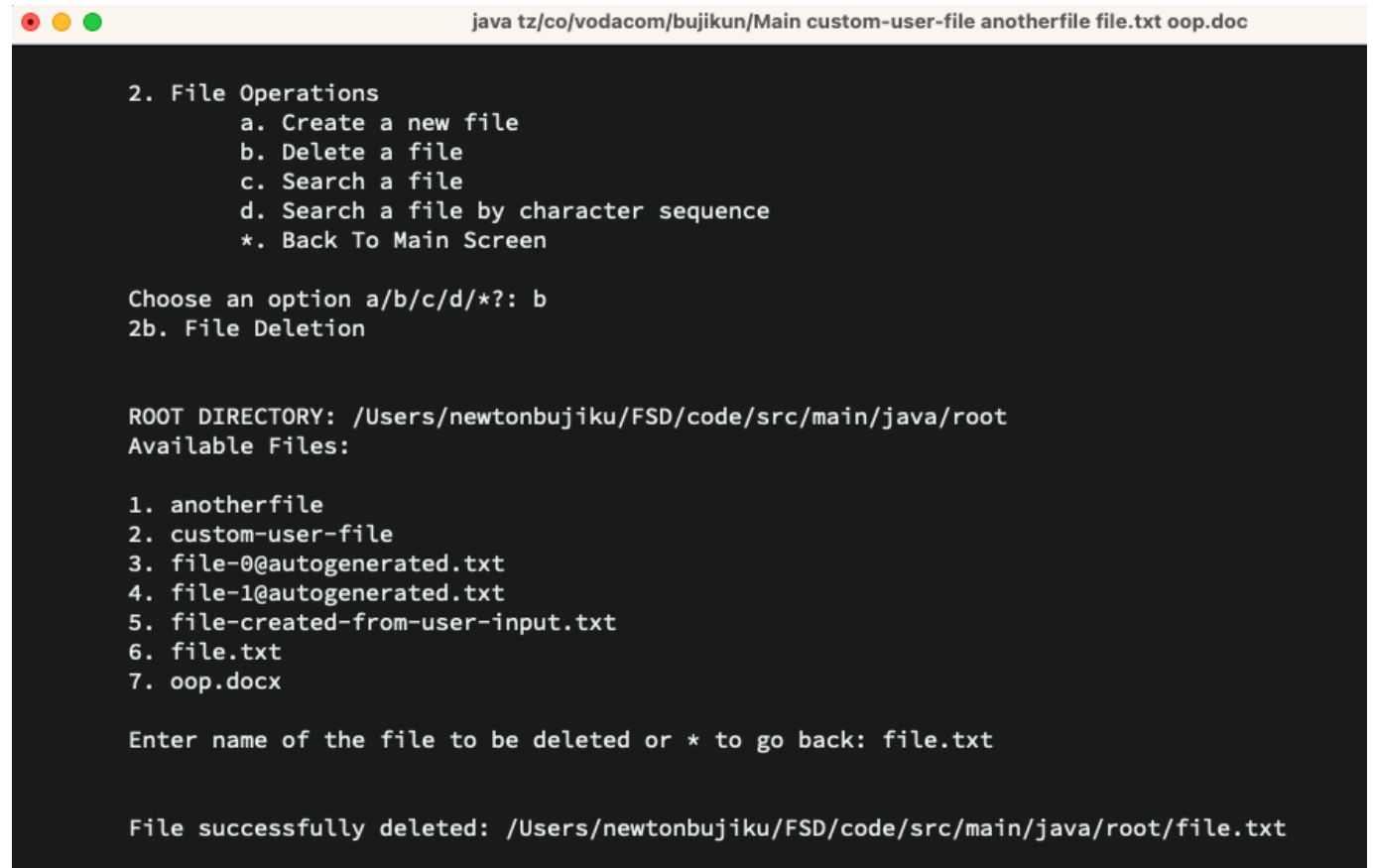
ROOT DIRECTORY: /Users/newtonbujiku/FSD/code/src/main/java/root
Available Files:

1. anotherfile
2. custom-user-file
3. file-0@autogenerated.txt
4. file-1@autogenerated.txt
5. file-created-from-user-input.txt
6. file.txt
7. oop.docx

2. File Operations
  a. Create a new file
  b. Delete a file
  c. Search a file
  d. Search a file by character sequence
  *. Back To Main Screen

Choose an option a/b/c/d/*?:
```

## 2.b File deletion

A terminal window with a title bar containing three colored circles (red, yellow, green) on the left and the text 'java tz/co/vodacom/bujikun/Main custom-user-file anotherfile file.txt oop.doc' on the right. The terminal content shows a menu for file operations, a selection of option 'b' for file deletion, a list of available files, and a confirmation message after deleting 'file.txt'.

```
java tz/co/vodacom/bujikun/Main custom-user-file anotherfile file.txt oop.doc

2. File Operations
  a. Create a new file
  b. Delete a file
  c. Search a file
  d. Search a file by character sequence
  *. Back To Main Screen

Choose an option a/b/c/d/*?: b
2b. File Deletion

ROOT DIRECTORY: /Users/newtonbujiku/FSD/code/src/main/java/root
Available Files:

1. anotherfile
2. custom-user-file
3. file-0@autogenerated.txt
4. file-1@autogenerated.txt
5. file-created-from-user-input.txt
6. file.txt
7. oop.docx

Enter name of the file to be deleted or * to go back: file.txt

File successfully deleted: /Users/newtonbujiku/FSD/code/src/main/java/root/file.txt
```

## 2.c File Search by exact file name

A name of the file and extension(if any) must be typed exactly otherwise it will be an error

### 2. File Operations

- a. Create a new file
- b. Delete a file
- c. Search a file
- d. Search a file by character sequence
- \*. Back To Main Screen

Choose an option a/b/c/d/\*?: c

#### 2b. File Search

Enter exact name of the file to be searched or \* to go back: oop.docx

Found file: /Users/newtonbujiku/FSD/code/src/main/java/oop.docx

### 2. File Operations

- a. Create a new file
- b. Delete a file
- c. Search a file
- d. Search a file by character sequence
- \*. Back To Main Screen

Choose an option a/b/c/d/\*?: c

#### 2b. File Search

Enter exact name of the file to be searched or \* to go back: fakefile.pdf

File not present in the root directory

### 2. File Operations

- a. Create a new file
- b. Delete a file
- c. Search a file
- d. Search a file by character sequence
- \*. Back To Main Screen

Choose an option a/b/c/d/\*?:

## 2.d File search by a sequence of characters

Provide a search string, and if any of the file names contains that string, the file will be displayed.

```
java tz/co/vodacom/bujikun/Main custom-user-file anotherfi

2. File Operations
  a. Create a new file
  b. Delete a file
  c. Search a file
  d. Search a file by character sequence
  *. Back To Main Screen

Choose an option a/b/c/d/*?: d
2b. File Search By Character Sequence

Enter character(s) to be used in search or * to go back: us

Found 2 files :

    custom-user-file
    file-created-from-user-input.txt

2. File Operations
  a. Create a new file
  b. Delete a file
  c. Search a file
  d. Search a file by character sequence
  *. Back To Main Screen

Choose an option a/b/c/d/*?: d
2b. File Search By Character Sequence

Enter character(s) to be used in search or * to go back: ed

Found 3 files :

    file-0@autogenerated.txt
    file-1@autogenerated.txt
    file-created-from-user-input.txt
```