

## **Source Code:**

```
package demo;

import java.io.File;
import java.io.FileReader;
import java.io.IOException;
import java.util.Arrays;
import java.util.Scanner;

public class VirtualKey {
    File folder=new File("D:\\ProjectPhase1");
    public VirtualKey(){
        if(folder.exists()) {
            folder.mkdirs();
            System.out.println("Directory =>" +folder.getAbsolutePath()+"\n");
        }
    }
    void showFiles() {
        if(folder.list().length==0) {
            System.out.println("The folder is empty");
        }else {
            String [] list=folder.list();
            System.out.println("Current Files in "+folder+" as ascending order:");
            Arrays.sort(list);
            for(String a:list) {
                System.out.println(a);
            }
        }
    }
    void addFile(String Filename) throws IOException {
        File new_one= new File(folder, Filename);
```

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String[] a=folder.list();
for(String b:a) {
    if(Filename.equalsIgnoreCase(b)){
        System.out.println("File already exists");
        return;
    }
}
new_one.createNewFile();
System.out.println("File Added to the Folder");

}

void delFile(String DelFile) {
    File del_one =new File(folder, DelFile);
    String a[]=folder.list();
    for(String b:a ) {
        if(DelFile.equals(b)&&del_one.delete()) {
            System.out.println("File Deleted Successfully");
            return;
        }
    }
    System.out.println("File Not Found - FNF");
}

void searchFile(String Search) throws IOException {
    String a[]=folder.list();
    for(String b:a) {
        if(Search.equals(b)) {
            System.out.println("File exists at "+folder);
            System.out.println("Contents in the file:");
            File search_one=new File(folder, Search);
            FileReader c= new FileReader(search_one);
            int data;
            while(((data=c.read())!=-1) {
                System.out.print((char)data);
            }
        }
    }
}

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        c.close();
        return;
    }
}
System.out.println("File Not Found - FNF");
}

```

```

public static void main(String[] args) {
    Scanner sc =new Scanner(System.in);
    System.out.println("Virtual Key for your repositories\n");
    VirtualKey obj = new VirtualKey();
    while(true) {
        System.out.println("");
        System.out.println("Following are the operations to be performed \n");
        System.out.println("1. To display the current files in ascending order\n");
        System.out.println("2. Business Level Operation menu \n");
        System.out.println("3. Terminate Program\n");
        System.out.println("Enter the operation according to your requirement: \n");

        int choice=sc.nextInt();
        switch(choice) {

            case 1:
                obj.showFiles();
                break;

            case 2:
                Boolean temp= true;
                while(temp) {
                    System.out.println("");
                    System.out.println("Option 1 : To Add a file in the existing
Directory");

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        System.out.println("Option 2 : To Delete a file from the existing
Directory. ");
        System.out.println("Option 3 : To Search a user specified file from the
Directory");
        System.out.println("Option 4 : Back to the previous menu");

int option =sc.nextInt();
switch(option) {
case 1:
    System.out.println("Enter the FileName to add:");
    String Filename=sc.next();
    try {
        obj.addFile(Filename);
    } catch (IOException e) {
        System.out.println("Error Occured: "+e);
    }
    break;
case 2:
    System.out.println("Enter the fileName to delete: ");
    String DelFile = sc.next();
    obj.delFile(DelFile);
    break;
case 3:
    System.out.println("Enter the fileName to search: ");
    String Search=sc.next();
    try {
        obj.searchFile(Search);
    } catch (IOException e) {
        System.out.println("Error Occured: "+e);
    }
    break;
case 4:
    temp=false;
    break;

```

default:

```
System.out.println("Invalid Choice ! Enter the correct choice :\n");  
break;
```

```
}
```

```
}
```

```
break;
```

case 3:

```
System.out.println("Progam Terminated.....Thank you!");  
System.exit(0);
```

default:

```
System.out.println("Invalid Choice ! Enter the correct choice :\n");
```

```
}
```

```
}
```

```
}
```

```
}
```