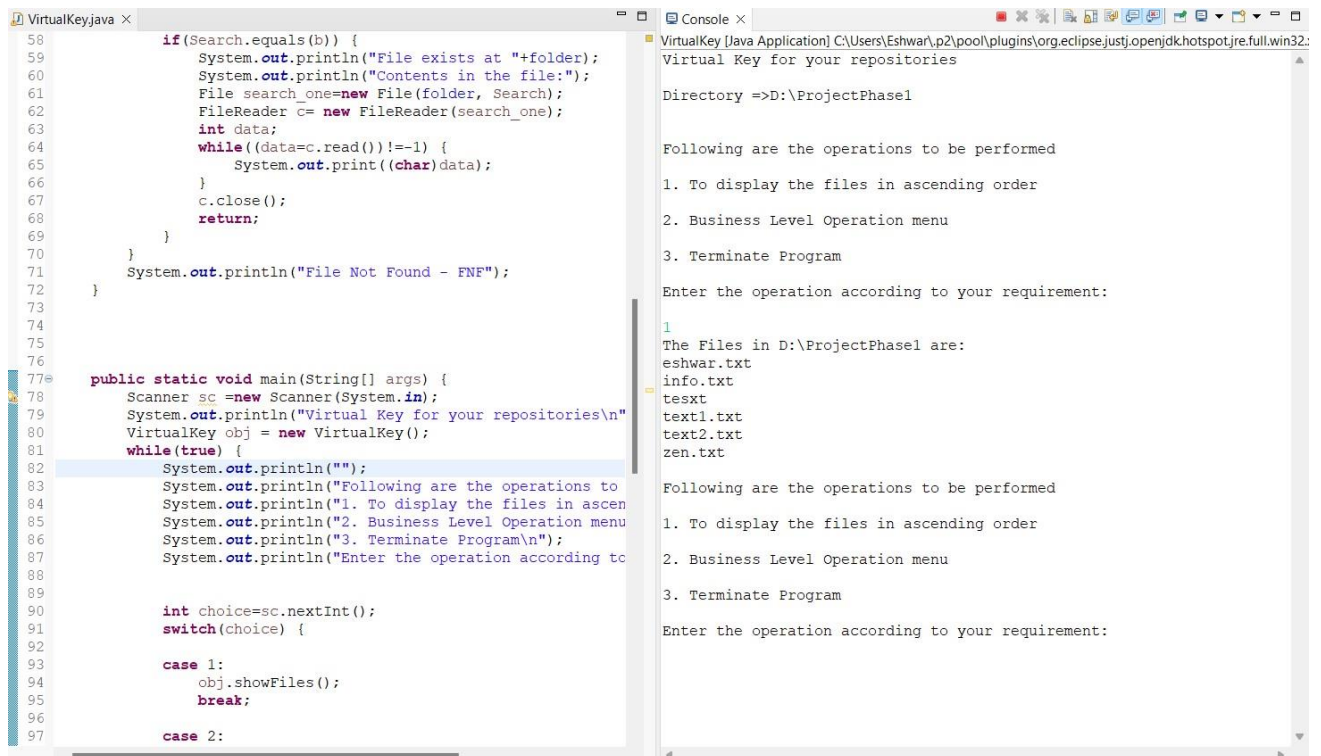


## Output:

### 1. Current Files in Ascending order:



The screenshot shows the Eclipse IDE with two windows. The left window, titled 'VirtualKey.java', contains the following Java code:

```
58     if(Search.equals(b)) {
59         System.out.println("File exists at "+folder);
60         System.out.println("Contents in the file:");
61         File search_one=new File(folder, Search);
62         FileReader c= new FileReader(search_one);
63         int data;
64         while((data=c.read())!=-1) {
65             System.out.print((char)data);
66         }
67         c.close();
68         return;
69     }
70     System.out.println("File Not Found - FNF");
71 }
72
73
74
75
76
77 public static void main(String[] args) {
78     Scanner sc =new Scanner(System.in);
79     System.out.println("Virtual Key for your repositories\n");
80     VirtualKey obj = new VirtualKey();
81     while(true) {
82         System.out.println("");
83         System.out.println("Following are the operations to");
84         System.out.println("1. To display the files in ascen");
85         System.out.println("2. Business Level Operation menu");
86         System.out.println("3. Terminate Program\n");
87         System.out.println("Enter the operation according to");
88
89
90         int choice=sc.nextInt();
91         switch(choice) {
92
93         case 1:
94             obj.showFiles();
95             break;
96
97         case 2:
```

The right window, titled 'Console', shows the program's output:

```
VirtualKey [Java Application] C:\Users\Eshwar.p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe
Virtual Key for your repositories

Directory =>D:\ProjectPhase1

Following are the operations to be performed

1. To display the files in ascending order
2. Business Level Operation menu
3. Terminate Program

Enter the operation according to your requirement:
1
The Files in D:\ProjectPhase1 are:
eshwar.txt
info.txt
tesxt
text1.txt
text2.txt
zen.txt

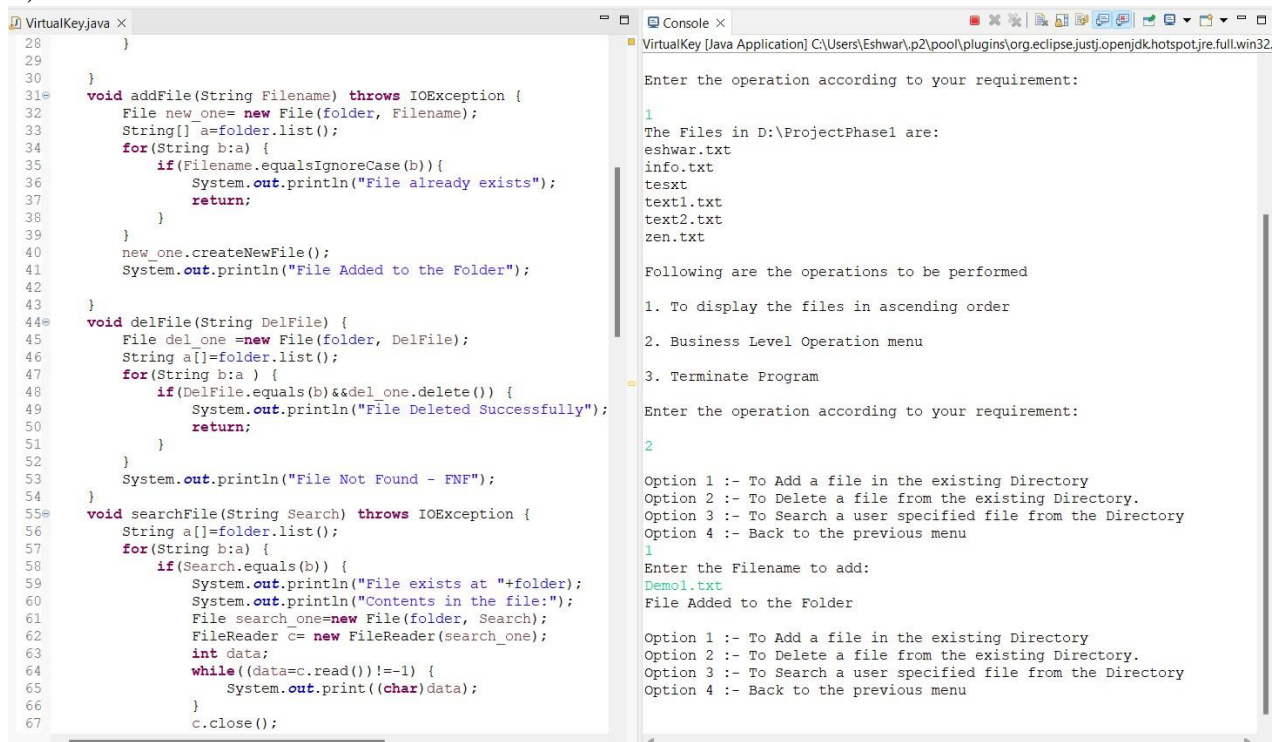
Following are the operations to be performed

1. To display the files in ascending order
2. Business Level Operation menu
3. Terminate Program

Enter the operation according to your requirement:
```

### 2. Business Level Operation Menu:

#### a) Add file to the folder:



The screenshot shows the Eclipse IDE with two windows. The left window, titled 'VirtualKey.java', contains the following Java code:

```
28     }
29
30 }
31 void addFile(String Filename) throws IOException {
32     File new_one= new File(folder, Filename);
33     String[] a=folder.list();
34     for(String b:a) {
35         if(Filename.equalsIgnoreCase(b)){
36             System.out.println("File already exists");
37             return;
38         }
39     }
40     new_one.createNewFile();
41     System.out.println("File Added to the Folder");
42 }
43
44 void delFile(String DelFile) {
45     File del_one =new File(folder, DelFile);
46     String a[]=folder.list();
47     for(String b:a ) {
48         if(DelFile.equals(b)&&del_one.delete()) {
49             System.out.println("File Deleted Successfully");
50             return;
51         }
52     }
53     System.out.println("File Not Found - FNF");
54 }
55 void searchFile(String Search) throws IOException {
56     String a[]=folder.list();
57     for(String b:a) {
58         if(Search.equals(b)) {
59             System.out.println("File exists at "+folder);
60             System.out.println("Contents in the file:");
61             File search_one=new File(folder, Search);
62             FileReader c= new FileReader(search_one);
63             int data;
64             while((data=c.read())!=-1) {
65                 System.out.print((char)data);
66             }
67             c.close();
68         }
69     }
70 }
```

The right window, titled 'Console', shows the program's output:

```
VirtualKey [Java Application] C:\Users\Eshwar.p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe
Virtual Key for your repositories

Enter the operation according to your requirement:
1
The Files in D:\ProjectPhase1 are:
eshwar.txt
info.txt
tesxt
text1.txt
text2.txt
zen.txt

Following are the operations to be performed

1. To display the files in ascending order
2. Business Level Operation menu
3. Terminate Program

Enter the operation according to your requirement:
2
Option 1 :- To Add a file in the existing Directory
Option 2 :- To Delete a file from the existing Directory.
Option 3 :- To Search a user specified file from the Directory
Option 4 :- Back to the previous menu
1
Enter the Filename to add:
Demol.txt
File Added to the Folder

Option 1 :- To Add a file in the existing Directory
Option 2 :- To Delete a file from the existing Directory.
Option 3 :- To Search a user specified file from the Directory
Option 4 :- Back to the previous menu
```

## b) Delete file in the folder:

```
VirtualKey.java x Console x
43 }
44 void delFile(String DelFile) {
45     File del_one = new File(folder, DelFile);
46     String a[] = folder.list();
47     for(String b:a) {
48         if(DelFile.equals(b) && del_one.delete()) {
49             System.out.println("File Deleted Successfully");
50             return;
51         }
52     }
53     System.out.println("File Not Found - FNF");
54 }
55 void searchFile(String Search) throws IOException {
56     String a[] = folder.list();
57     for(String b:a) {
58         if(Search.equals(b)) {
59             System.out.println("File exists at "+folder);
60             System.out.println("Contents in the file:");
61             File search_one = new File(folder, Search);
62             FileReader c = new FileReader(search_one);
63             int data;
64             while((data=c.read())!=-1) {
65                 System.out.print((char)data);
66             }
67             c.close();
68             return;
69         }
70     }
71     System.out.println("File Not Found - FNF");
72 }
73
74
75
76
77 public static void main(String[] args) {
78     Scanner sc = new Scanner(System.in);
79     System.out.println("Virtual Key for your repositories\n");
80     VirtualKey obj = new VirtualKey();
81     while(true) {
82         System.out.println("");
83     }
84 }
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```

d) Back to the previous menu:

The screenshot shows a Java IDE with two windows. The left window, titled 'VirtualKey.java', contains a Java program with a menu system. The right window, titled 'Console', shows the program's execution. The code in 'VirtualKey.java' includes a 'while' loop that keeps the program running until the user chooses to go back to the previous menu (Option 4). The console output shows the user selecting Option 2 to delete a file, entering 'eshwar.txt', and successfully deleting it. The menu is then displayed again, and the user selects Option 3 to search for a file, entering 'info.txt'. The console shows that the file exists and displays its contents: 'Hi there!'.

```
96
97 case 2:
98     Boolean temp= true;
99     while(temp) {
100         System.out.println("");
101         System.out.println("Option 1 :- To Add a file in the e");
102         System.out.println("Option 2 :- To Delete a file from");
103         System.out.println("Option 3 :- To Search a user speci");
104         System.out.println("Option 4 :- Back to the previous m");
105
106         int option =sc.nextInt();
107         switch(option) {
108             case 1:
109                 System.out.println("Enter the Filename to add:");
110                 String Filename=sc.next();
111                 try {
112                     obj.addFile(Filename);
113                 } catch (IOException e) {
114                     System.out.println("Error Occured: "+e);
115                 }
116                 break;
117             case 2:
118                 System.out.println("Enter the file name to delete:");
119                 String DelFile = sc.next();
120                 obj.delFile(DelFile);
121                 break;
122             case 3:
123                 System.out.println("Enter the fiename to search: ");
124                 String Search=sc.next();
125                 try {
126                     obj.searchFile(Search);
127                 } catch (IOException e) {
128                     System.out.println("Error Occured: "+e);
129                 }
130                 break;
131             case 4:
132                 temp=false;
133                 break;
134             default:
135                 System.out.println("Invalid Choice ! Enter the cor");
136         }
137     }
138 }
139
140 }
141 break;
142 case 3:
143     System.out.println("Program Terminated.....Thank you!");
144     System.exit(0);
145 default:
146     System.out.println("Invalid Choice ! Enter the correct cho");
147 }
148 }
149
150
151
152
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156
```

VirtualKey [Java Application] C:\Users\Eshwar\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32

Option 1 :- To Add a file in the existing Directory  
Option 2 :- To Delete a file from the existing Directory.  
Option 3 :- To Search a user specified file from the Directory  
Option 4 :- Back to the previous menu  
2  
Enter the file name to delete:  
eshwar.txt  
File Deleted Successfully  
Option 1 :- To Add a file in the existing Directory  
Option 2 :- To Delete a file from the existing Directory.  
Option 3 :- To Search a user specified file from the Directory  
Option 4 :- Back to the previous menu  
3  
Enter the fiename to search:  
info.txt  
File exists at D:\ProjectPhasel  
Contents in the file:  
Hi there!  
Option 1 :- To Add a file in the existing Directory  
Option 2 :- To Delete a file from the existing Directory.  
Option 3 :- To Search a user specified file from the Directory  
Option 4 :- Back to the previous menu  
4  
Following are the operations to be performed  
1. To display the files in ascending order  
2. Business Level Operation menu  
3. Terminate Program  
Enter the operation according to your requirement:

3. Exit from the application:

The screenshot shows a Java IDE with two windows. The left window, titled 'VirtualKey.java', contains a Java program with a menu system. The right window, titled 'Console', shows the program's execution. The code in 'VirtualKey.java' includes a 'while' loop that keeps the program running until the user chooses to go back to the previous menu (Option 4). The console output shows the user selecting Option 2 to delete a file, entering 'textt', and the program responding 'File Not Found - FNF'. The menu is then displayed again, and the user selects Option 3 to search for a file, entering 'textt'. The console shows that the file exists and displays its contents: 'Hi there!'.

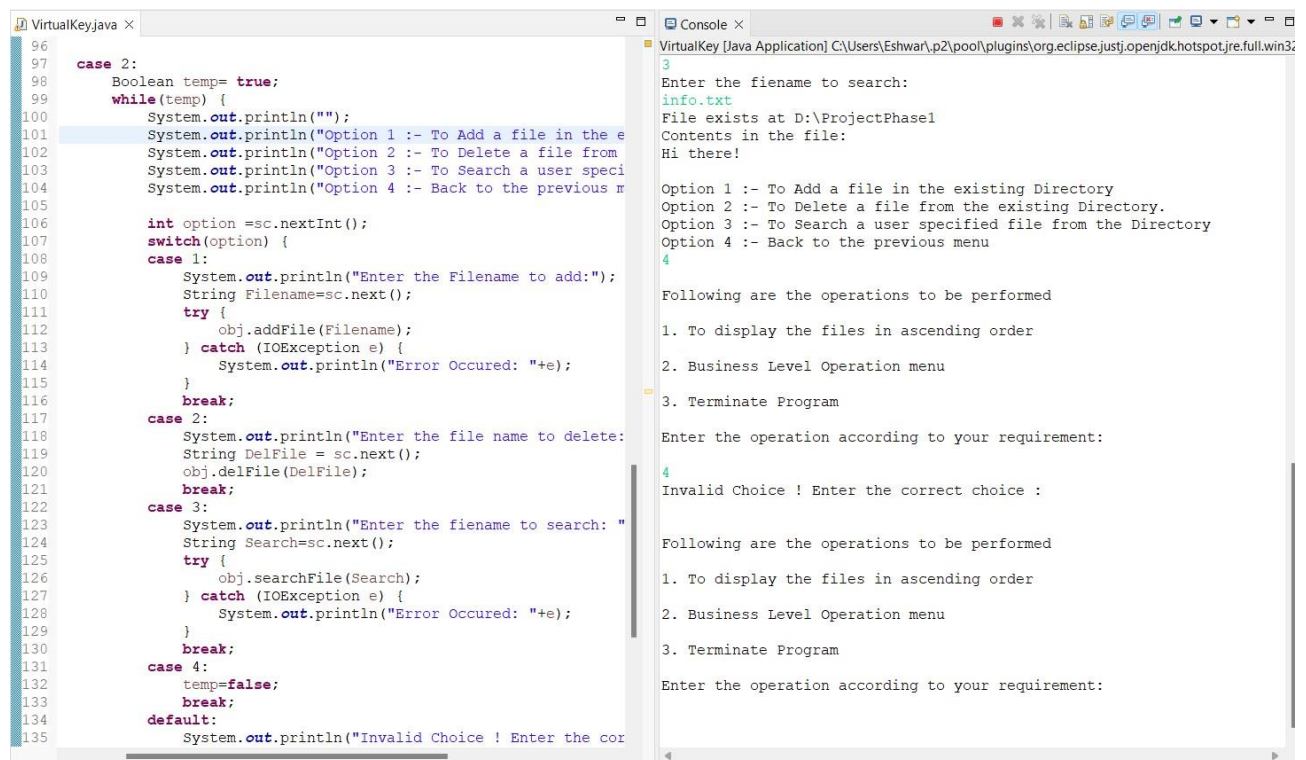
```
117
118 case 2:
119     System.out.println("Enter the file name to delete:");
120     String DelFile = sc.next();
121     obj.delFile(DelFile);
122     break;
123 case 3:
124     System.out.println("Enter the fiename to search: ");
125     String Search=sc.next();
126     try {
127         obj.searchFile(Search);
128     } catch (IOException e) {
129         System.out.println("Error Occured: "+e);
130     }
131     break;
132 case 4:
133     temp=false;
134     break;
135 default:
136     System.out.println("Invalid Choice ! Enter the cor");
137     break;
138 }
139
140 }
141 break;
142 case 3:
143     System.out.println("Program Terminated.....Thank you!");
144     System.exit(0);
145 default:
146     System.out.println("Invalid Choice ! Enter the correct cho");
147 }
148 }
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```

<terminated> VirtualKey [Java Application] C:\Users\Eshwar\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32

1. To display the files in ascending order  
2. Business Level Operation menu  
3. Terminate Program  
Enter the operation according to your requirement:  
2  
Option 1 :- To Add a file in the existing Directory  
Option 2 :- To Delete a file from the existing Directory.  
Option 3 :- To Search a user specified file from the Directory  
Option 4 :- Back to the previous menu  
2  
Enter the file name to delete:  
textt  
File Not Found - FNF  
Option 1 :- To Add a file in the existing Directory  
Option 2 :- To Delete a file from the existing Directory.  
Option 3 :- To Search a user specified file from the Directory  
Option 4 :- Back to the previous menu  
4  
Following are the operations to be performed  
1. To display the files in ascending order  
2. Business Level Operation menu  
3. Terminate Program  
Enter the operation according to your requirement:  
3  
\\Program Terminated.....Thank you!



#### 4. Default Statement:



The screenshot displays the Eclipse IDE with two panels. The left panel shows the source code of `VirtualKey.java`, and the right panel shows the console output.

**Source Code (VirtualKey.java):**

```
96
97     case 2:
98         Boolean temp= true;
99         while(temp) {
100             System.out.println("");
101             System.out.println("Option 1 :- To Add a file in the e
102             System.out.println("Option 2 :- To Delete a file from
103             System.out.println("Option 3 :- To Search a user speci
104             System.out.println("Option 4 :- Back to the previous m
105
106         int option =sc.nextInt();
107         switch(option) {
108             case 1:
109                 System.out.println("Enter the Filename to add:");
110                 String Filename=sc.next();
111                 try {
112                     obj.addFile(Filename);
113                 } catch (IOException e) {
114                     System.out.println("Error Occured: "+e);
115                 }
116                 break;
117             case 2:
118                 System.out.println("Enter the file name to delete:
119                 String DelFile = sc.next();
120                 obj.delFile(DelFile);
121                 break;
122             case 3:
123                 System.out.println("Enter the fiename to search: "
124                 String Search=sc.next();
125                 try {
126                     obj.searchFile(Search);
127                 } catch (IOException e) {
128                     System.out.println("Error Occured: "+e);
129                 }
130                 break;
131             case 4:
132                 temp=false;
133                 break;
134             default:
135                 System.out.println("Invalid Choice ! Enter the cor
```

**Console Output:**

```
VirtualKey [Java Application] C:\Users\Eshwar\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32
3
Enter the fiename to search:
info.txt
File exists at D:\ProjectPhase1
Contents in the file:
Hi there!

Option 1 :- To Add a file in the existing Directory
Option 2 :- To Delete a file from the existing Directory.
Option 3 :- To Search a user specified file from the Directory
Option 4 :- Back to the previous menu
4

Following are the operations to be performed

1. To display the files in ascending order
2. Business Level Operation menu
3. Terminate Program

Enter the operation according to your requirement:
4
Invalid Choice ! Enter the correct choice :

Following are the operations to be performed

1. To display the files in ascending order
2. Business Level Operation menu
3. Terminate Program

Enter the operation according to your requirement:
```