

OBJECT ORIENTED PROGRAMMING LAB

Experiment No.: 17

Aim

Program to list the sub directories and files in a given directory and also search for a file name.

Procedure

```
import java.io.File;
```

```
import java.io.*;
```

```
import java.util.*;
```

```
public class Program to list the sub directories and files in a given directory and also search  
for a file name.
```

```
{
```

```
public static final String RESET = "\033[0m";
```

```
public static final String RED = "\033[0;31m";
```

```
public static final String TEXT_RESET = "\u001B[0m";
```

```
public static final String TEXT_BLACK = "\u001B[30m";
```

```
public static final String TEXT_RED = "\u001B[31m";
```

```
static void RecursivePrint(File[] arr, int index, int level, String searchfor) {
```

```
if (index == arr.length)
```

```
return;
```

```
for (int i = 0; i < level; i++)
```

```
System.out.print("\t");
```

```
if (arr[index].getName().toLowerCase().contains(searchfor))
```

```
System.out.print(TEXT_RED);
```

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else

System.out.print(RESET);

if (arr[index].isFile())

System.out.println(arr[index].getName());

else if (arr[index].isDirectory()) {

System.out.println "[" + arr[index].getName() + "];

RecursivePrint(arr[index].listFiles(), 0, level + 1, searchfor);

}

RecursivePrint(arr, ++index, level, searchfor);

}

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

System.out.println("Enter the directory path");

String maindirpath = scan.nextLine();

System.out.println("Enter the file/directory name to search");

String searchfor = scan.nextLine();

File maindir = new File(maindirpath);

if (maindir.exists() && maindir.isDirectory()) {

File arr[] = maindir.listFiles();

System.out.println("#####");

System.out.println("Files from main directory" + maindir);

System.out.println("#####");

RecursivePrint(arr, 0, 0, searchfor.toLowerCase());

```
}  
  
}  
  
}
```

Output

```
D:\java>javac p1.java  
  
D:\java>java p1  
Enter the directory path  
D:\java  
Enter the file/directory name to search  
p1.java  
#####  
Files from main directoryD:\java  
#####  
+[\mare.class  
+[\mcir.class  
+[\mEmployee.class  
+[\mMatrixAdditionExample.class  
+[\mMatrixAdditionExample.java  
+[\mMatrixMultiplicationExample.java  
+[\mp1.class  
+[\31mp1.java  
+[\mperson.class  
+[\mrect.class  
+[\mTeacher2.class  
+[\mTeacher2.java  
+[\mtest7 .java  
+[\mtest7.class  
+[\mtest7.java  
  
D:\java>■
```