OBJECT ORIENTED PROGRAMMING LAB

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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 p1 {
  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);
   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()); // array,index,level,search
   }
  }
}
```

Output:

```
D:\Share>java p1
Enter the directory path
D:\Share
Enter the file/directory name to search
read.java
##################################################
Files from main directoryD:\Share
##################################################
←[0mcopy.class
←[0mcopy.java
←[0moutput.txt
←[0mp1.class
←[0mp1.java
←[0mread.class
←[31mread.java

D:\Share>
```