OOP LAB EXERCISE 10

Question 1:
Write a java program using built-in exception to check if the file is found at a particular location.

CODE:

```
package EX10;

import java.io.*;
import java.util.Scanner;

public class filefinder {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter File name or Path: ");
        String FPath = scan.nextLine();

        try {
            File file = new File(FPath);

            if (file.exists()) {
                System.out.println("File found");
            } else {
                throw new FileNotFoundException("File not found");
            }
        } catch (FileNotFoundException e) {
            System.out.println(e.getMessage());
        }
    }
}
```

OUTPUT:

```
$  /usr/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java -cp /home/ai_ds-b3/
.config/Code/User/workspaceStorage/c150051b45723de8d56f3039657778b7/redhat.java
/jdt_ws/JAVA_810a656f/bin EX10.filefinder
Enter File name or Path:
sample.txt
File found
$ ^C

$  cd /home/ai_ds-b3/Documents/JAVA ; /usr/bin/env /usr/lib/jvm/java-11-openjdk
-amd64/bin/java -cp /home/ai_ds-b3/.config/Code/User/workspaceStorage/c150051b4
5723de8d56f3039657778b7/redhat.java/jdt_ws/JAVA_810a656f/bin EX10.filefinder
Enter File name or Path:
new.txtx
File not found
```

Question 2:
Write a java program to get the last modification date and time of a file.

CODE:

```
package EX10;

import java.util.*;
import java.io.*;

public class getdetails {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter File name or Path: ");
        String FPath = scan.nextLine();

        try {
            File file = new File(FPath);

            if (file.exists()) {
                long lastModified = file.lastModified();
                Date date = new Date(lastModified);
                System.out.println("Last modified Date & Time: " + date);

            } else {
                throw new FileNotFoundException("File not found");
            }
        } catch (FileNotFoundException e) {
            System.out.println(e.getMessage());
        }
    }
}
```

OUTPUT:

```
$  /usr/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java -cp /home/ai_ds-b3/.confi
g/Code/User/workspaceStorage/c150051b45723de8d56f3039657778b7/redhat.java/jdt_ws/JAVA
_810a656f/bin EX10.getdetails
Enter File name or Path:
sample.txt
Last modified Date & Time: Thu Oct 03 08:58:48 IST 2024
$
```

Question 3:
Write a java program to rename an existing file.

CODE:

```
package EX10;

import java.util.*;
import java.io.*;

public class fileren {
   public static void main(String[] args) {

      Scanner scan = new Scanner(System.in);
      System.out.println("Enter original File name or Path: ");
      String originalFilePath = scan.nextLine();
      System.out.println("Enter name to rename: ");
      String newFilePath = scan.nextLine();

      File originalFile = new File(originalFilePath);
      File newFile = new File(newFilePath);

      if (originalFile.exists()) {
         if (originalFile.renameTo(newFile)) {
            System.out.println("File renamed successfully: " + originalFilePath + " -> "
+ newFilePath);
         } else {
            System.out.println("Failed to rename file: " + originalFilePath);
         }
      } else {
         System.out.println("File not found: " + originalFilePath);
      }
   }
}
```

OUTPUT:

```
$  /usr/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java -cp /home/ai_ds-b3/
.config/Code/User/workspaceStorage/c150051b45723de8d56f3039657778b7/redhat.java
/jdt_ws/JAVA_810a656f/bin EX10.fileren
Enter original File name or Path:
sample.txt
Enter name to rename:
sample1.txt
File renamed successfully: sample.txt -> sample1.txt
$
```

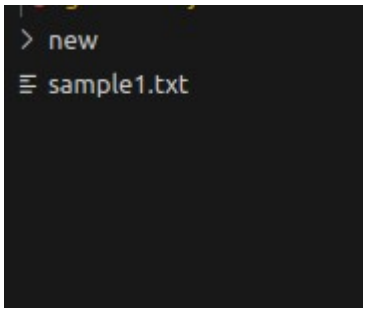
Question 4:
Write a java program to create directory or folder in particular drive

CODE:

```
package EX10;

import java.io.*;
import java.util.*;

public class createdict {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter Directory name or Path: ");
        String DPath = scan.nextLine();

        File directory = new File(DPath);

        if (directory.exists()) {
            System.out.println("Directory already exists");
        } else {
            if (directory.mkdirs()) {
                System.out.println("Directory created successfully: ");
            } else {
                System.out.println("Failed to create directory: ");
            }
        }
    }
}
```

OUTPUT:

```
$  /usr/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java -cp /home/ai_ds-b3/.confi
g/Code/User/workspaceStorage/c150051b45723de8d56f3039657778b7/redhat.java/jdt_ws/JAVA
_810a656f/bin EX10.createdict
Enter Directory name or Path:
new
Directory created successfully:
$
```



Question 5:
Write a java program to check whether a file can be read or not.

CODE:

```
package EX10;

import java.io.*;
import java.util.*;

public class checkread {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter File name or Path: ");
        String FPath = scan.nextLine();

        try {
            File file = new File(FPath);

            if (file.exists()) {
                if (file.canRead()){
                    System.out.println("File can be read");
                } else {
                    System.out.println("File cannot be read");
                }
            } else {
                throw new FileNotFoundException("File not found");
            }
        } catch (FileNotFoundException e) {
            System.out.println(e.getMessage());
        }
    }
```

}

OUTPUT:

```
$  /usr/bin/env /usr/lib/jvm/java-11-openjdk-amd64/bin/java -cp /home/ai_ds-b3/
.config/Code/User/workspaceStorage/c150051b45723de8d56f3039657778b7/redhat.java
/jdt_ws/JAVA_810a656f/bin EX10.checkread
Enter File name or Path:
sample1.txt
File can be read
$
```

RESULT:

The above programs has been executed successfully