**File Handling Mechanisms**

**Create a file:**

**Code:**

package filehandlingmechanisms;

import java.io.File;

import java.io.FileOutputStream;

import java.io.FileWriter;

import java.io.IOException;

import java.nio.charset.StandardCharsets;

import java.nio.file.Files;

import java.nio.file.Paths;

import java.nio.file.StandardOpenOption;

import java.util.Arrays;

import java.util.List;

public class CreateNewFile

{

public static void main(String[] args) throws IOException

{

createFileUsingFileClass();

createFileUsingFileOutputStreamClass();

createFileIn\_NIO();

}

private static void createFileUsingFileClass() throws IOException

{

File file = new File("src//testFile.txt");

//Create the file

if (file.createNewFile()){

System.out.println("File is created!");

}else{

System.out.println("File already exists.");

}

//Write Content

FileWriter writer = new FileWriter(file);

writer.write("Test data");

writer.close();

}

private static void createFileUsingFileOutputStreamClass() throws IOException

{

String data = "Test data";

FileOutputStream out = new FileOutputStream("src//testFile1.txt");

out.write(data.getBytes());

out.close();

}

private static void createFileIn\_NIO() throws IOException

{

String data = "Test data";

Files.write(Paths.get("src//testFile3.txt"), data.getBytes());

List<String> lines = Arrays.asList("1st line", "2nd line")

Files.write(Paths.get("file6.txt"),

lines,

StandardCharsets.UTF\_8,

StandardOpenOption.CREATE,

StandardOpenOption.APPEND);

}

}

**Output:**

****

**Read a file:**

**Code:**

package filehandlingmechanisms;

import java.util.\*;

import java.nio.charset.StandardCharsets;

import java.nio.file.\*;

import java.io.\*;

public class ReadFileIntoList

{

public static List<String> readFileInList(String fileName)

{

List<String> lines = Collections.emptyList();

try

{

lines =

Files.readAllLines(Paths.get(fileName), StandardCharsets.UTF\_8);

}

catch (IOException e)

{

e.printStackTrace();

}

return lines;

}

public static void main(String[] args)

{

List l = readFileInList("src//testFile2.txt");

@SuppressWarnings("unchecked")

Iterator<String> itr = l.iterator();

while (itr.hasNext())

System.out.println(itr.next());

}

}

**Update a file:**

**Code:**

package filehandlingmechanisms;

import java.io.BufferedReader;

import java.io.File;

import java.io.FileReader;

import java.io.FileWriter;

import java.io.IOException;

public class TextFileModificationProgram

{

static void modifyFile(String filePath, String oldString, String newString)

{

File fileToBeModified = new File(filePath);

String oldContent = "";

BufferedReader reader = null;

FileWriter writer = null;

try

{

reader = new BufferedReader(new FileReader(fileToBeModified));

String line = reader.readLine();

while (line != null)

{

oldContent = oldContent + line + System.lineSeparator();

line = reader.readLine();

}

String newContent = oldContent.replaceAll(oldString, newString);

writer = new FileWriter(fileToBeModified);

writer.write(newContent);

}

catch (IOException e)

{

e.printStackTrace();

}

finally

{

try

{

reader.close();

writer.close();

}

catch (IOException e)

{

e.printStackTrace();

}

}

}

public static void main(String[] args)

{

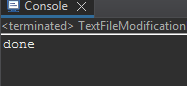
modifyFile("src//testFile2.txt", "85", "95");

System.out.println("done");

}

}

**Output:**

****

**Delete a file:**

**Code:**

package filehandlingmechanisms;

import java.io.IOException;

import java.nio.file.\*;

public class Test

{

public static void main(String[] args)

{

try

{

Files.deleteIfExists(Paths.get("c://temp//testFile2.txt"));

}

catch(NoSuchFileException e)

{

System.out.println("No such file/directory exists");

}

catch(DirectoryNotEmptyException e)

{

System.out.println("Directory is not empty.");

}

catch(IOException e)

{

System.out.println("Invalid permissions.");

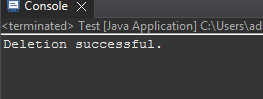
}

System.out.println("Deletion successful.");

}

}

**Output:**

****