**Problem Statement – 1**

/\*

Write a program to check if the file exist is a file or directory.

\*/

import java.io.\*;

/\*\*

 \* practical\_9\_problem\_statement\_1

 \*/

public class practical\_9\_problem\_statement\_1 {

    public static void main(String[] args) {

        try {

            File f = new File("practical\_9\_problem\_statement\_1.txt");

            f.createNewFile();

            if (f.exists()) {

                System.out.println("Is a File.");

            }

            else if (f.isDirectory()) {

                System.out.println("Is a Direcotry.");

            }

        }

        catch (Exception e) {

            System.out.println("File Does Not Exists.");

        }

    }

}

**Output:**

Text

Description automatically generated

**Problem Statement – 2**

/\*

Write a program to change the file permissions.

\*/

import java.io.\*;

/\*\*

 \* practical\_9\_problem\_statement\_2

 \*/

public class practical\_9\_problem\_statement\_2 {

    public static void main(String[] args) {

        File file = new File("practical\_9\_problem\_statement\_2.txt");

        if (file.exists()) {

            file.setExecutable(true);

            file.setReadable(true);

            file.setWritable(false);

            System.out.println("File Permissions Changed.");

            System.out.println("----------File Permissions----------");

            System.out.println("Executable: " + file.canExecute());

            System.out.println("Readable: " + file.canRead());

            System.out.println("Writable: " + file.canWrite());

        }

        else {

            System.out.println("File Not Found.");

        }

    }

}

**Output:**

Graphical user interface, text, application, email

Description automatically generated

**Problem Statement – 3**

/\*

Write a program to perform simple read and write operation into file.

\*/

import java.io.\*;

/\*\*

 \* practical\_9\_problem\_statement\_3

 \*/

public class practical\_9\_problem\_statement\_3 {

    public static void writeFile(String fileName) {

        try {

            FileWriter fileWriter = new FileWriter(fileName);

            BufferedWriter bufferWriter = new BufferedWriter(fileWriter);

            bufferWriter.write("This is sample file for Practical 9 Problem Statement 3.");

            bufferWriter.close();

            fileWriter.close();

            System.out.println("\nText Succesfully Written in File");

        } catch (Exception e) {

            System.out.println(e);

        }

    }

    public static void readFile(String fileName) {

        try {

            FileReader fileReader = new FileReader(fileName);

            BufferedReader bufferReader = new BufferedReader(fileReader);

            System.out.println("\nText in the File: ");

            String st;

            while ((st = bufferReader.readLine()) != null) {

                System.out.println(st);

            }

            bufferReader.close();

            fileReader.close();

            System.out.println("\nText Succesfully Read From File");

        } catch (Exception e) {

            System.out.println(e);

        }

    }

    public static void main(String[] args) {

        writeFile("practical\_9\_problem\_statement\_3.txt");

        readFile("practical\_9\_problem\_statement\_3.txt");

    }

}

**Output:**

Graphical user interface, text, application, email

Description automatically generated

**Problem Statement – 4**

/\*

Write a program that writes an Serial No.(int), First Name (String), CGPA (float) and Grade(char) into a text file using bufferedWriter and displays the contents using bufferedReader.

\*/

import java.io.\*;

import java.util.Scanner;

/\*\*

 \* practical\_9\_problem\_statement\_4

 \*/

public class practical\_9\_problem\_statement\_4 {

    public static void writeFile(String fileName) {

        Scanner sc = new Scanner(System.in);

        try {

            FileWriter fileWriter = new FileWriter(fileName);

            BufferedWriter bufferWriter = new BufferedWriter(fileWriter);

            System.out.print("Enter the Serial Number: ");

            String serialNumber = sc.nextLine();

            System.out.print("Enter the Name: ");

            String name = sc.nextLine();

            System.out.print("Enter the CGPA: ");

            String cgpa = sc.nextLine();

            System.out.print("Enter the Grade: ");

            char grade = sc.next().charAt(0);

            bufferWriter.write(serialNumber);

            bufferWriter.write("\t");

            bufferWriter.write(name);

            bufferWriter.write("\t");

            bufferWriter.write(cgpa);

            bufferWriter.write("\t");

            bufferWriter.write(grade);

            bufferWriter.close();

            fileWriter.close();

            System.out.println("\nText Succesfully Written in File");

        } catch (Exception e) {

            System.out.println(e);

        }

    }

    public static void readFile(String fileName) {

        try {

            FileReader fileReader = new FileReader(fileName);

            BufferedReader bufferReader = new BufferedReader(fileReader);

            System.out.println("Content in the File: ");

            String st;

            while ((st = bufferReader.readLine()) != null) {

                System.out.println(st);

            }

            bufferReader.close();

            fileReader.close();

        } catch (Exception e) {

            System.out.println(e);

        }

    }

    public static void main(String[] args) {

        writeFile("practical\_9\_problem\_statement\_4.txt");

        readFile("practical\_9\_problem\_statement\_4.txt");

    }

}

**Output:**

Graphical user interface, text, application, email

Description automatically generated