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E22CSEU0519

Q1

```java
import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import java.util.Scanner;

public class FileHandling {


    public static void main(String[] args){
        Scanner scan = new Scanner(System.in);

        try {
            File file = new File("newTextFile.txt");
            FileWriter fileWriter = new FileWriter(file);

            System.out.println("Please enter 5 integer values: ");
            for (int i = 0; i < 5; i++) {
                try{
                    fileWriter.write(scan.nextInt() + "\n");
                } catch (Exception e){
                    System.out.println("Please enter integer values
only!");

                    i--;
                }
            }

            System.out.println("File created successfully!");
            fileWriter.close();

            System.out.println("Reading file and calculating sum of
integers: ");
            int sum = 0;

            Scanner fileScan = new Scanner(file);
            while(fileScan.hasNextLine()){
                sum += Integer.parseInt(fileScan.nextLine());
            }

            System.out.println("Sum of integers: " + sum);
```

```
        } catch (IOException e) {
            e.printStackTrace();
        }


    }
}
```

```
Please enter 5 integer values:
4
5
6
7
8
File created successfully!
Reading file and calculating sum of integers:
Sum of integers: 30



...Program finished with exit code 0
Press ENTER to exit console.
```

Q2
CODE:

```java
import java.io.File;

import java.io.FileWriter;

import java.io.IOException;

import java.util.Scanner;


public class FileHandling2 {

    /**
     * Create a java program that will create a text file, will ask user
to provide double values
     * to be included into the created file as String values and will
later read each string values
     * from file, will transform them into corresponding double values and
will print the sum of
```

```java
     * corresponding Math.Radians(Sin) values of each individual value
read from file:
     */
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);


        try {
            File file = new File("newTextFile.txt");
            file.createNewFile();

            FileWriter fileWriter = new FileWriter(file);

            System.out.println("Please enter 5 double values: ");
            for (int i = 0; i < 5; i++) {

                String input = scan.nextLine();
                try {
                    Double.parseDouble(input);
                    fileWriter.write(input + "\n");
                } catch (Exception e) {
                    System.out.println("Please enter double values
only!");

                    i--;
                }

            }

            System.out.println("File created successfully!");
            fileWriter.close();

            System.out.println("Reading file and calculating sum of
Math.Radians(Sin) values: ");
            double sum = 0;
            Scanner fileScan = new Scanner(file);
            while (fileScan.hasNextLine()) {
                sum +=
Math.sin(Math.toRadians(Double.parseDouble(fileScan.nextLine())));
            }
            System.out.println("Sum of Math.Radians(Sin) values: " + sum);
            file.delete();
```

```java
                System.out.println("File deleted successfully!");

        } catch (IOException e) {
            e.printStackTrace();
        }

    }

}
```

Q3

```java
import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import java.util.Scanner;
import java.util.Vector;

public class FileHandling3 {




    public static void main(String[] args) {

        Scanner scan = new Scanner(System.in);

        try {
```

```java
            File file = new File("newTextFile.txt");
            file.createNewFile();
            FileWriter fileWriter = new FileWriter(file);

            System.out.println("Please enter 5 integer values : ");
            for (int i = 0; i < 5; i++) {
                String input = scan.nextLine();
                try {
                    fileWriter.write(Integer.parseInt(input) + "\n");
                } catch (Exception e) {
                    System.out.println("Please enter integer values only!
");

                    i--;

                }
            }

            System.out.println("File created successfully!");
            fileWriter.close();

            System.out.println("Reading file and storing integers in a
Vector List: ");
            Scanner fileScan = new Scanner(file);
            Vector<Integer> vector = new Vector<>();

            while (fileScan.hasNextLine()) {
                vector.add(Integer.parseInt(fileScan.nextLine()));
            }

            System.out.println("Vector List: " + vector);
            file.delete();
            System.out.println("File deleted successfully!");


        } catch (IOException e) {
            e.printStackTrace();
        }


    }
}
```

```
Please enter 5 integer values :
2
3
4
5
6
File created successfully!
Reading file and storing integers in a Vector List:
Vector List: [2, 3, 4, 5, 6]
File deleted successfully!


...Program finished with exit code 0
Press ENTER to exit console.
```

Q4

```java
import java.io.File;
import java.io.FileWriter;
import java.util.Scanner;

public class FileHandling4 {

    /**
     * Create a java program that will create a text file, will ask user
to provide string values to
     * be included into the created file file1 as String values and will
later read each string values
     * from file, will transform them into corresponding upper case values
and will store each
     * resultant upper case value into a second file file2 and will
finally will display the values
```

```java
     * read from file2.
     */
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        try {
            File file1 = new File("file1.txt");
            FileWriter fileWriter1 = new FileWriter(file1);
            File file2 = new File("file2.txt");
            FileWriter fileWriter2 = new FileWriter(file2);

            file1.createNewFile();
            file2.createNewFile();

            System.out.println("File1 and File2 created successfully!");

            System.out.println("Please enter 5 string values: ");
            for (int i = 0; i < 5; i++) {
                fileWriter1.write(sc.nextLine() + "\n");
            }

            fileWriter1.close();
            System.out.println("File1 closed successfully!");

            Scanner fileScan1 = new Scanner(file1);
            while (fileScan1.hasNextLine()) {
                fileWriter2.write(fileScan1.nextLine().toUpperCase() +
"\n");
            }

            fileWriter2.close();
            System.out.println("File2 closed successfully!");

            System.out.println("Reading file2 and displaying values: ");
            Scanner fileScan2 = new Scanner(file2);
            while (fileScan2.hasNextLine()) {
                System.out.println(fileScan2.nextLine());
            }
```

```java
            file1.delete();
            file2.delete();
            System.out.println("File1 and File2 deleted successfully!");



        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```
File1 and File2 created successfully!
Please enter 5 string values:
4
5
6
7
8
File1 closed successfully!
File2 closed successfully!
Reading file2 and displaying values:
4
5
6
7
8
File1 and File2 deleted successfully!


...Program finished with exit code 0
Press ENTER to exit console.
```

Q5
```java
import java.io.File;
import java.io.FileWriter;
import java.util.Arrays;
import java.util.Scanner;
```

```java
public class FileHandling5 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        try {
            File file1 = new File("file1.txt");
            File file2 = new File("file2.txt");

            FileWriter file1Writer = new FileWriter(file1);
            FileWriter file2Writer = new FileWriter(file2);

            file1.createNewFile();
            file2.createNewFile();

            System.out.println("File1 and File2 created successfully!");

            System.out.println("Please enter 5 string values: ");
            for (int i = 0; i < 5; i++) {
                file1Writer.write(sc.nextLine() + "\n");
            }

            file1Writer.close();
            System.out.println("File1 closed successfully!");

            Scanner file1Scan = new Scanner(file1);
            String[] file1Values = new String[5];
            int i = 0;
            while (file1Scan.hasNextLine()) {
                file1Values[i] = file1Scan.nextLine();
                i++;
            }

            Arrays.sort(file1Values);

            for (String file1Value : file1Values) {
                file2Writer.write(file1Value + "\n");
            }
```

```java
            file2Writer.close();
            System.out.println("File2 closed successfully!");

            System.out.println("Reading file2 and displaying values: ");
            Scanner file2Scan = new Scanner(file2);
            while (file2Scan.hasNextLine()) {
                System.out.println(file2Scan.nextLine());
            }

            file1.delete();
            file2.delete();
            System.out.println("File1 and File2 deleted successfully!");

        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```
File1 and File2 created successfully!
Please enter 5 string values:
G
H
J
O
P
File1 closed successfully!
File2 closed successfully!
Reading file2 and displaying values:
G
H
J
O
P
File1 and File2 deleted successfully!


...Program finished with exit code 0
Press ENTER to exit console.
```