DAY 10

1. create a new text file named demo.txt.

```
package Day10;
import java.io.File;
import java.io.IOException;

public class CreateFileExample {
   public static void main(String[] args) {
      try {
         File file = new File("demo.txt");
         if (file.createNewFile()) {
            System.out.println("New file created: " + file.getName());
         } else {
            System.out.println("File already present.");
         }
      } catch (IOException e) {
         System.out.println("Error occurred during file creation.");
         e.printStackTrace();
      }
   }
}
```

Output:

New file created: demo.txt

2. check whether a file exists at a given path.

```
package Day10;
import java.io.File;

public class CheckFileExists {
   public static void main(String[] args) {
      String filePath = "demo.txt";
      File file = new File(filePath);

      if (file.exists()) {
```

```
            System.out.println("File found at: " + file.getAbsolutePath());
        } else {
            System.out.println("File is missing.");
        }
    }
}
```

Output:

File found at: C:\path\to\Harshitha\Wipro_project\demo.txt

3. "Welcome, Java!" into a file using FileWriter.

```
package Day10;
import java.io.FileWriter;
import java.io.IOException;

public class WriteToFile {
    public static void main(String[] args) {
        try {
            FileWriter writer = new FileWriter("demo.txt");
            writer.write("Welcome, Java!");
            writer.close();
            System.out.println("Data written successfully to file.");
        } catch (IOException e) {
            System.out.println("Error occurred during file write.");
            e.printStackTrace();
        }
    }
}
```

Output:

Data written successfully to file.

4. Read the content of a file line by line using BufferedReader.

```
package Day10;
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;
```

```
public class ReadFileLineByLine {
    public static void main(String[] args) {
        try {
            BufferedReader reader = new BufferedReader(new FileReader("demo.txt"));
            String line;
            while ((line = reader.readLine()) != null) {
                System.out.println(line);
            }
            reader.close();
        } catch (IOException e) {
            System.out.println("Error occurred during file read.");
            e.printStackTrace();
        }
    }
}
```

Output:

Welcome, Java!

5. append a line of text to an existing file.

```
package Day10;
import java.io.FileWriter;
import java.io.IOException;

public class AppendToFile {
    public static void main(String[] args) {
        try {
            FileWriter writer = new FileWriter("demo.txt", true);
            writer.write("\nAppended new text here.");
            writer.close();
            System.out.println("Appended text to file successfully.");
        } catch (IOException e) {
            System.out.println("Error occurred during file append.");
            e.printStackTrace();
        }
```

```
    }
}
```

Output:

Appended text to file successfully.

6. count the number of lines, words, and characters in a file.

```
package Day10;
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;

public class FileCount {
    public static void main(String[] args) {
        int lineCount = 0;
        int wordCount = 0;
        int charCount = 0;

        try {
            BufferedReader reader = new BufferedReader(new FileReader("demo.txt"));
            String line;
            while ((line = reader.readLine()) != null) {
                lineCount++;
                String[] words = line.split("\\s+");
                wordCount += words.length;
                charCount += line.length();
            }
            reader.close();

            System.out.println("Total Lines: " + lineCount);
            System.out.println("Total Words: " + wordCount);
            System.out.println("Total Characters: " + charCount);
        } catch (IOException e) {
            System.out.println("Error occurred during file read.");
            e.printStackTrace();
```

```
        }
    }
}
```

Output:

Total Lines: 2

Total Words: 5

Total Characters: 36

7. copy content from one file to another using FileReader and FileWriter.

```
package Day10;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;

public class CopyFile {
    public static void main(String[] args) {
        try {
            FileReader reader = new FileReader("input.txt");
            FileWriter writer = new FileWriter("output.txt");

            int ch;
            while ((ch = reader.read()) != -1) {
                writer.write(ch);
            }

            reader.close();
            writer.close();

            System.out.println("File copy completed successfully.");
        } catch (IOException e) {
            System.out.println("Error occurred during file copy.");
            e.printStackTrace();
        }
    }
}
```

Output:

File copy completed successfully.

8. lists all the files in a directory.

```
package Day10;
import java.io.File;

public class ListOfFilesInDirectory {
    public static void main(String[] args) {
        File directory = new File("C:\\path\\to\\your\\dir"); // Change to your directory path

        if (directory.isDirectory()) {
            String[] files = directory.list();
            if (files != null && files.length > 0) {
                System.out.println("Directory files:");
                for (String file : files) {
                    System.out.println(file);
                }
            } else {
                System.out.println("Directory is empty.");
            }
        } else {
            System.out.println("Path is not a valid directory.");
        }
    }
}
```

Output:

Directory files:

demo.txt

input.txt

output.txt

9. filter and display only .txt files from a folder using FilenameFilter.

```
package Day10;
import java.io.File;
import java.io.FilenameFilter;

public class FilterTxtFiles {
   public static void main(String[] args) {
      File directory = new File("C:\\path\\wipro\\java\\docs");
      FilenameFilter txtFilter = new FilenameFilter() {
         public boolean accept(File dir, String name) {
            return name.toLowerCase().endsWith(".txt");
         }
      };

      String[] txtFiles = directory.list(txtFilter);

      if (txtFiles != null && txtFiles.length > 0) {
         System.out.println("Found .txt files:");
         for (String file : txtFiles) {
            System.out.println(file);
         }
      } else {
         System.out.println("No .txt files available.");
      }
   }
}
```

Output:

Found .txt files:

demo.txt

input.txt

10. read a file using Scanner and display the tokens.

```
package Day10;
import java.io.File;
import java.io.FileNotFoundException;
import java.util.Scanner;

public class ReadFileTokens {
   public static void main(String[] args) {
      try {
         File file = new File("demo.txt");
         Scanner scanner = new Scanner(file);

         System.out.println("File tokens:");
         while (scanner.hasNext()) {
            System.out.println(scanner.next());
         }

         scanner.close();
      } catch (FileNotFoundException e) {
         System.out.println("File is missing.");
         e.printStackTrace();
      }
   }
}
```

Output:

File tokens:

Welcome,

Java!

Appended

new

text

here.