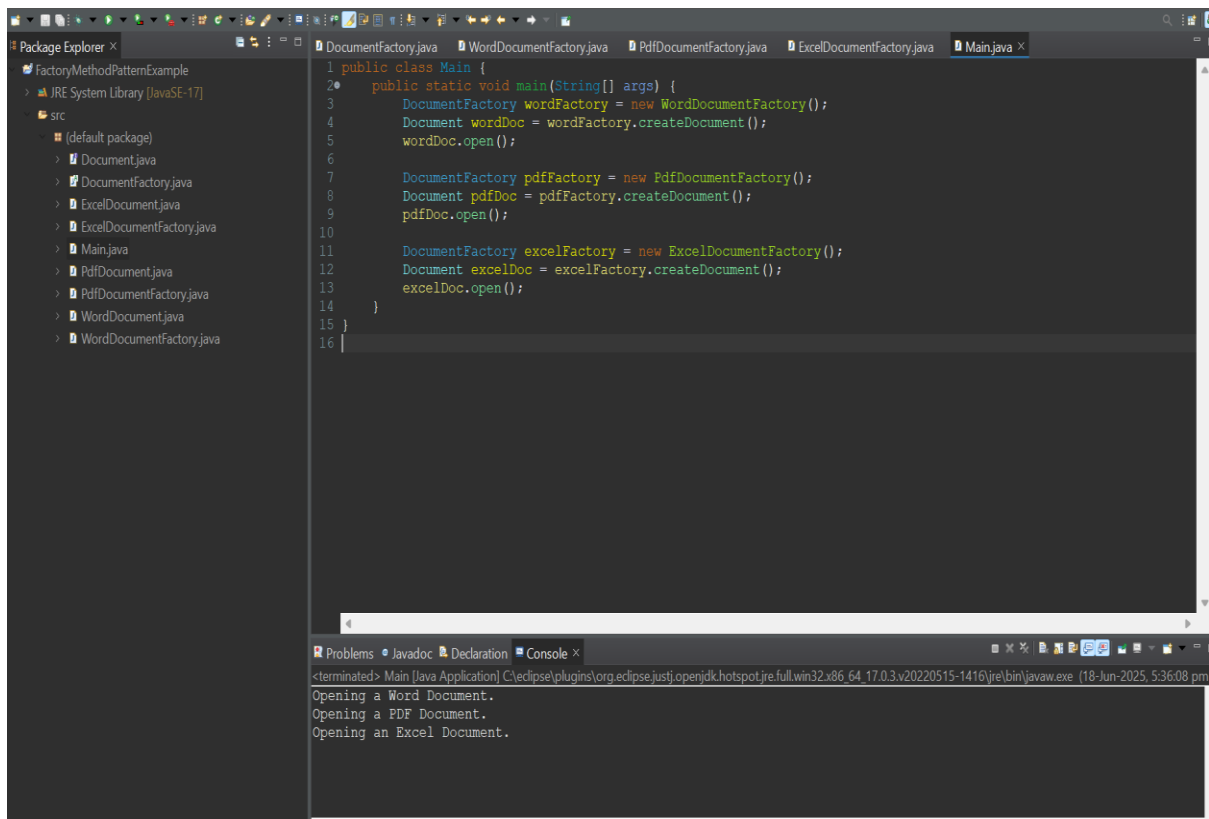


OutPut:-

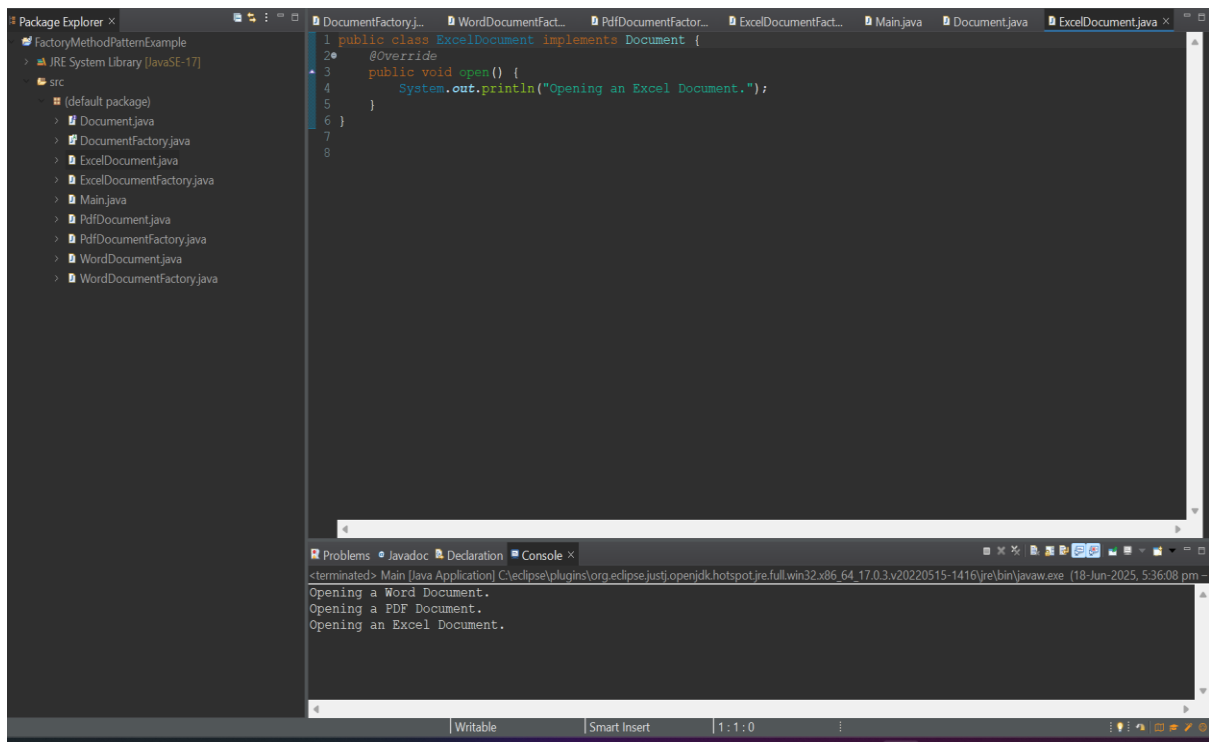


The screenshot shows the Eclipse IDE with the Package Explorer on the left and the Main.java file open in the editor. The code in Main.java creates three document factories (Word, PDF, and Excel) and calls their createDocument() and open() methods. The console at the bottom shows the output of the program.

```
1 public class Main {
2     public static void main(String[] args) {
3         DocumentFactory wordFactory = new WordDocumentFactory();
4         Document wordDoc = wordFactory.createDocument();
5         wordDoc.open();
6
7         DocumentFactory pdfFactory = new PdfDocumentFactory();
8         Document pdfDoc = pdfFactory.createDocument();
9         pdfDoc.open();
10
11        DocumentFactory excelFactory = new ExcelDocumentFactory();
12        Document excelDoc = excelFactory.createDocument();
13        excelDoc.open();
14    }
15 }
16
```

Console Output:

```
<terminated> Main [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.3.v20220515-1416\jre\bin\javaw.exe (18-Jun-2025, 5:36:08 pm)
Opening a Word Document.
Opening a PDF Document.
Opening an Excel Document.
```



The screenshot shows the Eclipse IDE with the Package Explorer on the left and the ExcelDocument.java file open in the editor. The code in ExcelDocument.java implements the Document interface and overrides the open() method to print "Opening an Excel Document.". The console at the bottom shows the output of the program.

```
1 public class ExcelDocument implements Document {
2     @Override
3     public void open() {
4         System.out.println("Opening an Excel Document.");
5     }
6 }
7
8
```

Console Output:

```
<terminated> Main [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.3.v20220515-1416\jre\bin\javaw.exe (18-Jun-2025, 5:36:08 pm)
Opening a Word Document.
Opening a PDF Document.
Opening an Excel Document.
```

