

#503(prac5)---03/08/19---

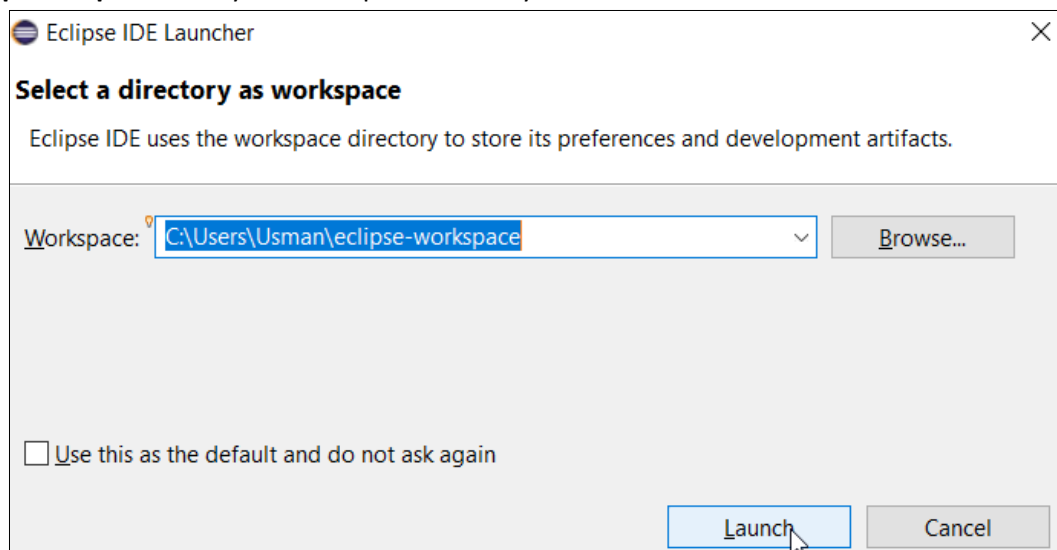
#AIM: Write and test a program to update 10 student records into Excel file(table).

PRE-REQUISITES:

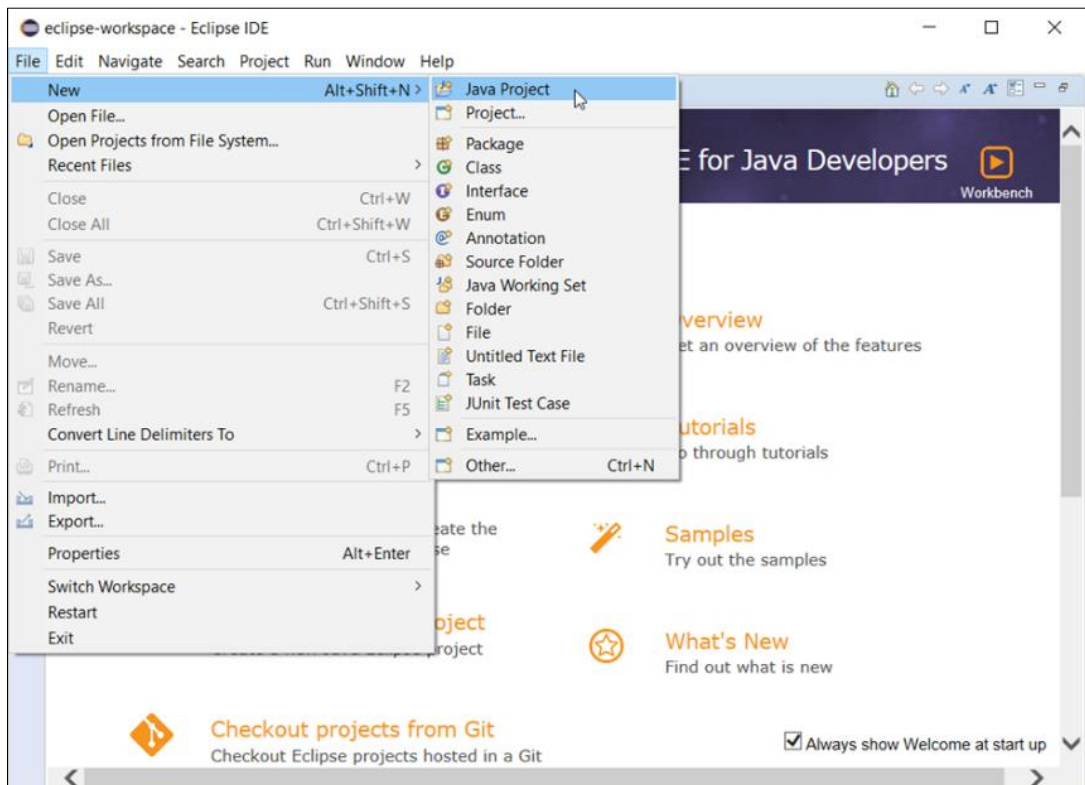
- 1) Check that you have **Eclipse IDE**.
- 2) To Download “JXL.JAR”:
 - Visit <http://www.java2s.com/Code/Jar/j/Downloadjxl26jar.htm>
 - Download this file: “jxl/jxl-2.6.jar.zip(603 k)” and **extract it**.(you’ll get the .jar file)

STEPS:

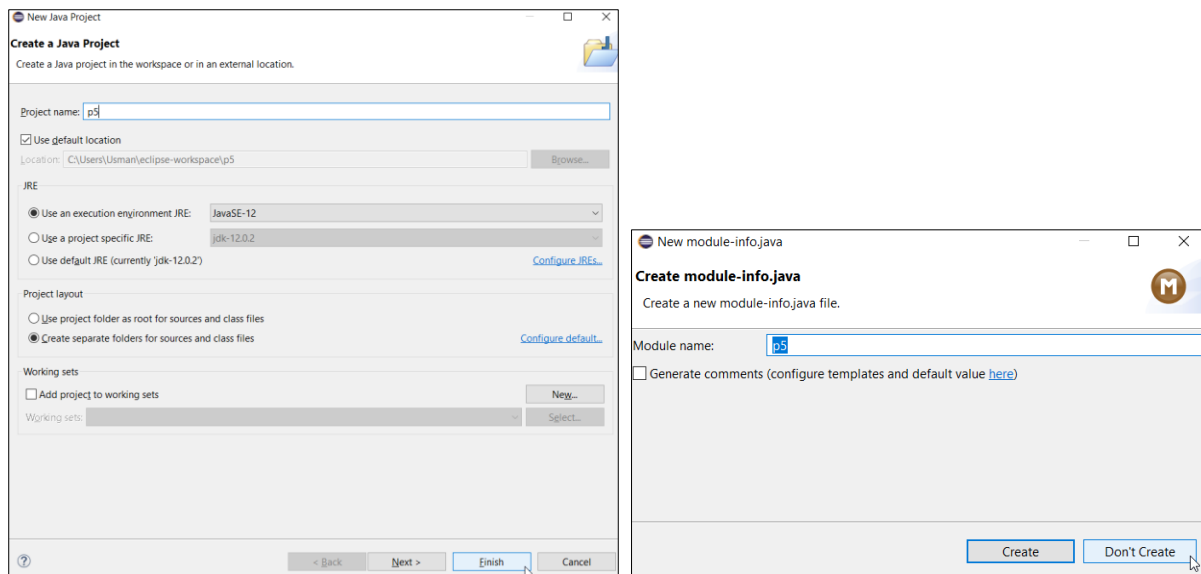
- 1) **Open Eclipse.** Select your workspace directory. Click **Launch**:



- 2) **Create a Project(File > New > Java Project):**

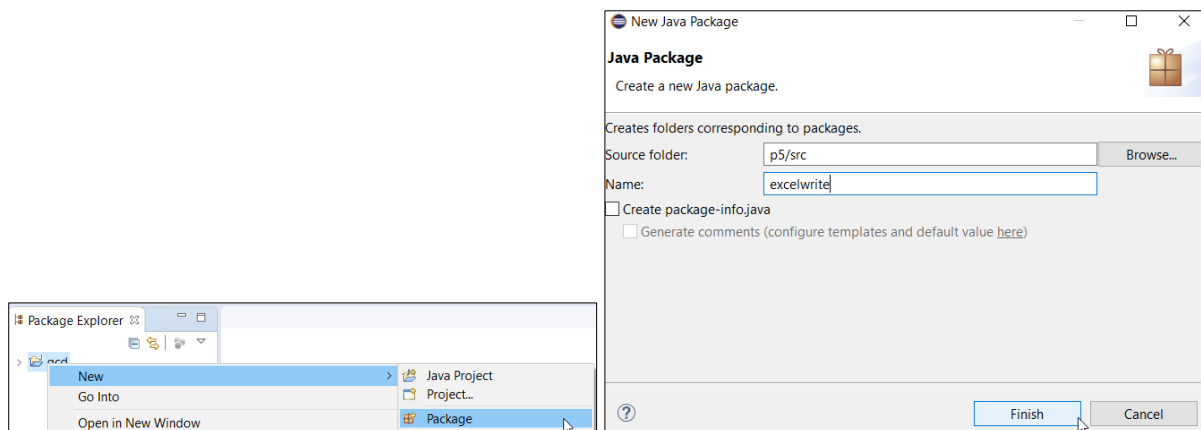


3) Name the project as “p5” > click **Finish** > click **Don't Create** module:

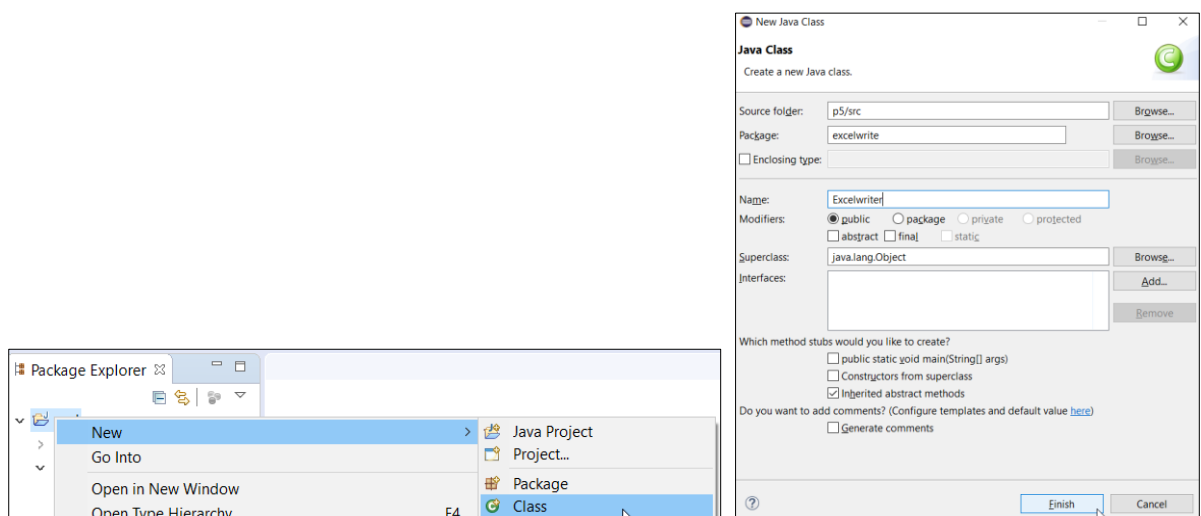


4) Close the “Welcome” tab.

5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):

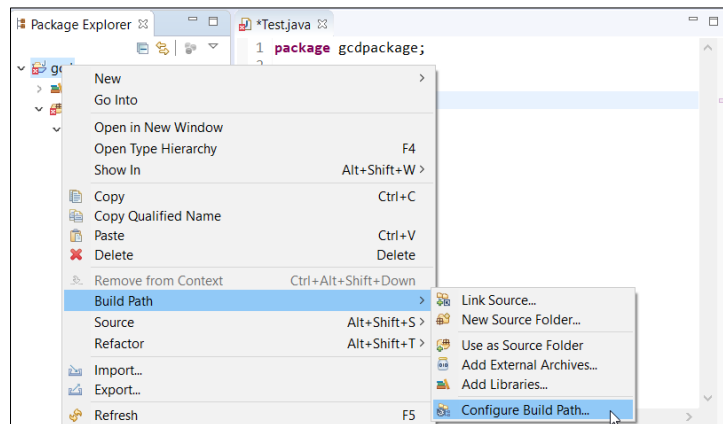


6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):

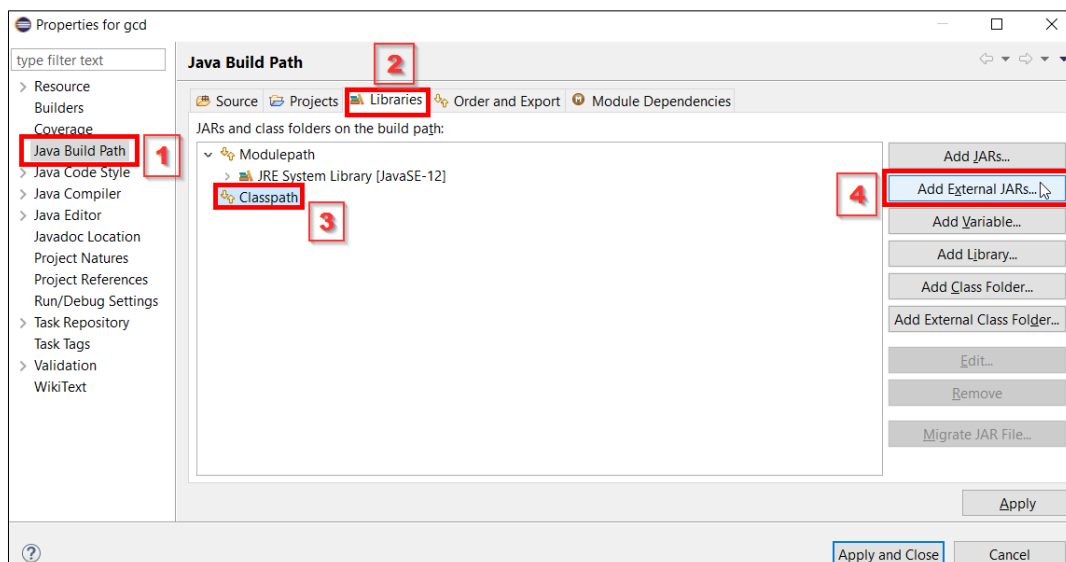


7) Adding "JXL(JAR file)" in Eclipse IDE:

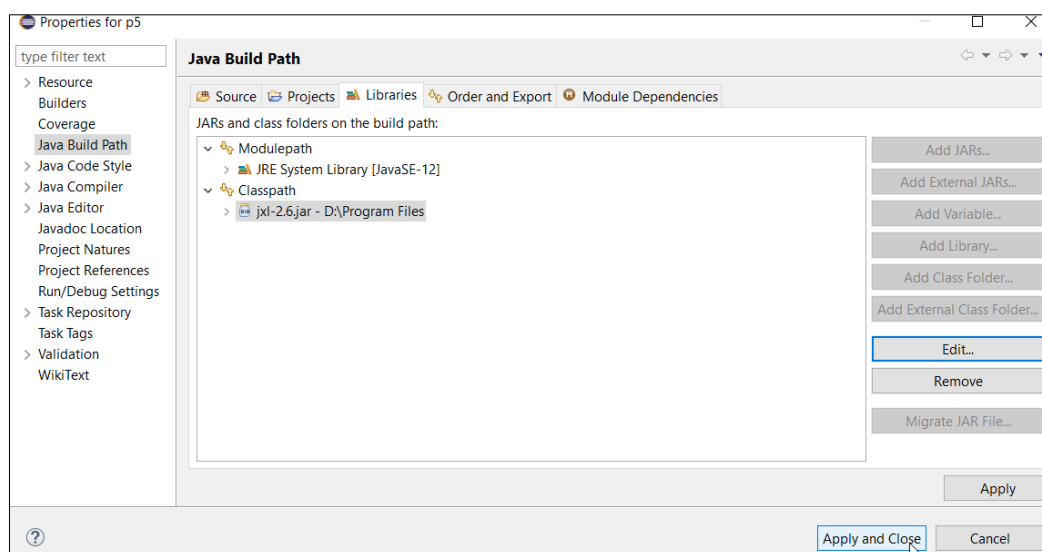
- right-click on Project Name > Build Path > Configure Build Path...



- now go under: Java Build Path > Libraries > Classpath > click Add External JARs...



- Browse and add JAR file > click Apply and Close :



8) Creating the *script* in JAVA:

(NOTE that this *script* will be run by Eclipse IDE)

(In simple words, it's like we are

-ordering Eclipse to run a script or to do a job

-of creating and opening .xls file

-and putting the values in the cells with the help of jxl.jar

-and to show the result.

-Hence automating the work in a local system(PC)).

---(Excelwriter.java)---

```
package excelwrite;

import jxl.*; //used for WorkbookSettings,Workbook
import jxl.write.*; //used for WriteException,WritableWorkbook,WritableSheet,Label
import jxl.write.Number; //used for Number
import java.io.*; //used for IOException,File
import java.util.Locale; //used for Locale

public class Excelwriter {
    public static void main(String[] args) throws IOException,WriteException {
        // TODO Auto-generated method stub
        int r=0,c=0;
        String header[]={ "Student
Name","Subject1","Subject2","Subject3","Total"};
        String
sname[]={ "Carls","James","Paul","Philip","Smith","Thomson","Rhodey","Stark","Gary"
,"AnneMarie"};
        int marks[]={50,45,60,55,70,45,67,78,89,90,30};

        File file = new File("student.xls");
        WorkbookSettings wbSettings = new WorkbookSettings();
        wbSettings.setLocale(new Locale("en", "EN"));
        WritableWorkbook workbook = Workbook.createWorkbook(file,
wbSettings);
        workbook.createSheet("Report", 0);
        WritableSheet excelSheet = workbook.getSheet(0);
        //creating header row
        for(r=0;r<1;r++) {
            for(c=0;c<header.length;c++) {
                Label l=new Label(c,r,header[c]);
                excelSheet.addCell(l);
            }
        }
        //filling name in column1
        for(r=1;r<=sname.length;r++) {
            for(c=0;c<1;c++) {
                Label l=new Label(c,r,sname[r-1]);
                excelSheet.addCell(l);
            }
        }
        //filling name in column2,3,4
        for(r=1;r<=sname.length;r++) {
            for(c=1;c<4;c++) {
                Number num = new Number(c, r, marks[r-1]);
                excelSheet.addCell(num);
            }
        }
    }
}
```

```

        //filling name in total
        for(r=1;r<=sname.length;r++) {
            for(c=4;c<5;c++) {
                int total=marks[r-1]+marks[r-1]+marks[r-1];
                Number num = new Number(c, r, total);
                excelSheet.addCell(num);
            }
        }
        workbook.write();
        workbook.close();
        System.out.println("Excel File Created!!!!");
    }
}

```

9) Run the file from Eclipse IDE:

- **OUTPUT:**

The screenshot shows the Eclipse IDE interface. On the left, the Project Explorer displays the file structure of the 'p5' project, with the 'student' file highlighted. The main editor window shows the 'Excelwriter.java' file. The code in the editor is as follows:

```

1 package excelwrite;
2
3 import jxl.*; //used for WorkbookSettings
4 import jxl.write.*; //used for WriteException
5 import jxl.write.Number; //used for Number
6 import java.io.*; //used for IOException,
7 import java.util.Locale; //used for Local
8
9 public class Excelwriter {
10     public static void main(String[] args) {
11         // TODO Auto-generated method stub
12     }
13 }

```

The console output at the bottom right shows the message: **Excel File Created!!!!**

10) Finish!

What is JXL.JAR:

-Java libraries are distributed as a ".jar" file

-jxl.jar is the library of JExcelApi, which is open source java API to read, write, and modify Excel spreadsheets dynamically. It contains all the compiled *.class files, associated metadata and resources that are used by the Java Excel API internally.