

#503(prac6)---24/08/19---

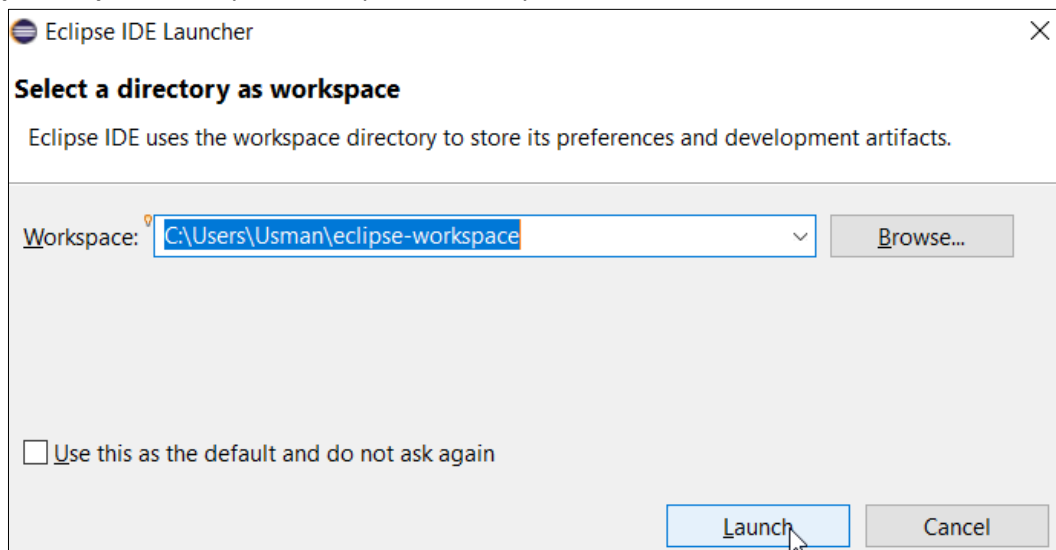
#AIM: Write and test a program to select the number of students from Excel file(table) who have scored 60 or more in any one subject(or all subjects).

PRE-REQUISITES:

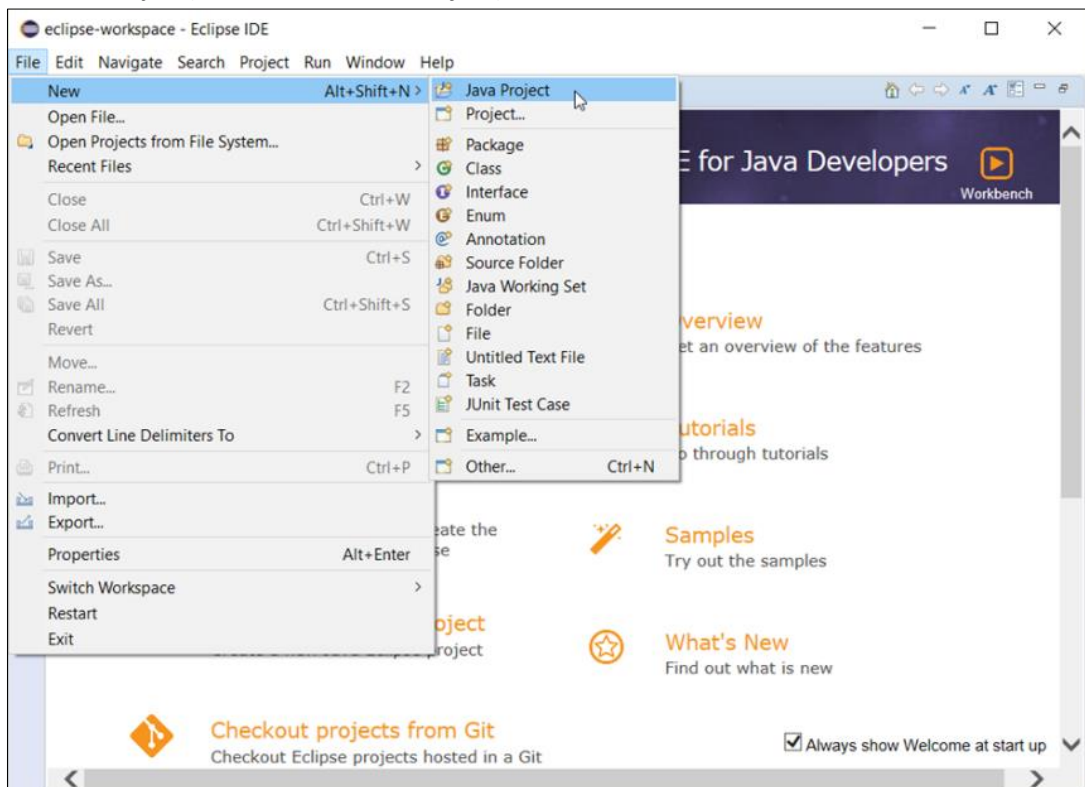
- 1) Check that you have **Eclipse IDE**.
- 2) Check that you have **JXL.JAR**.
- 3) Check that you've the **Excel file**("student.xls") that we'll be working on for reading data.

STEPS:

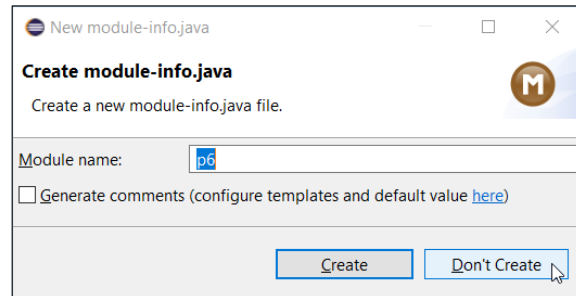
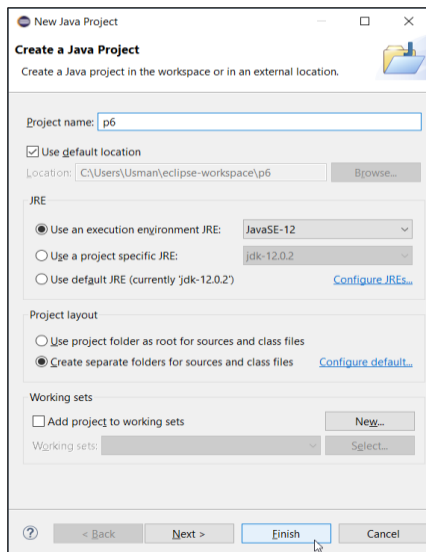
- 1) **Open Eclipse.** Select your workspace directory. Click **Launch**:



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

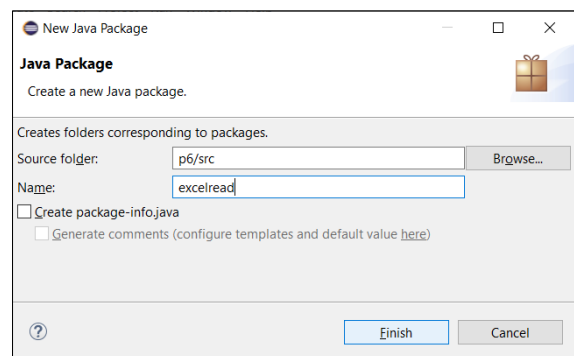
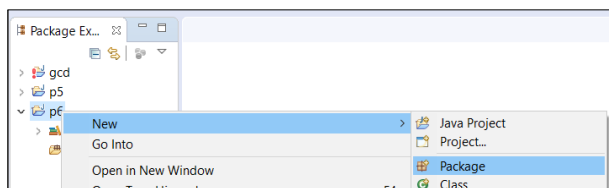


3) Name the project as “p6” > click **Finish** > click **Don't Create** module:

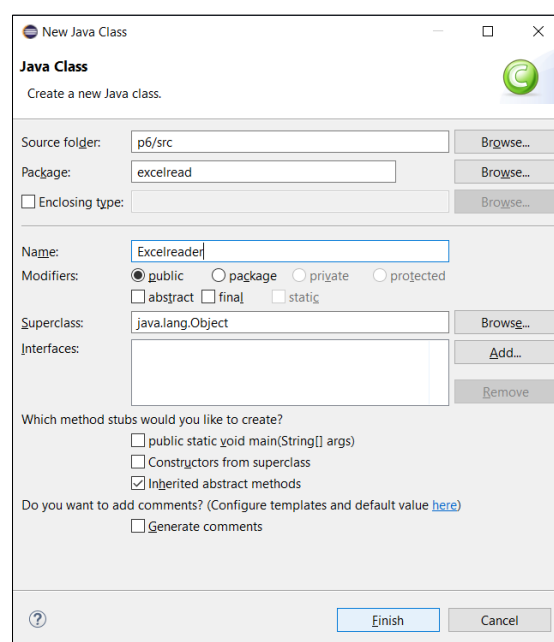
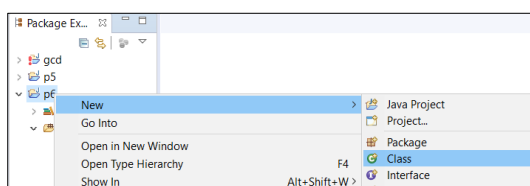


4) Close the “Welcome” tab.

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

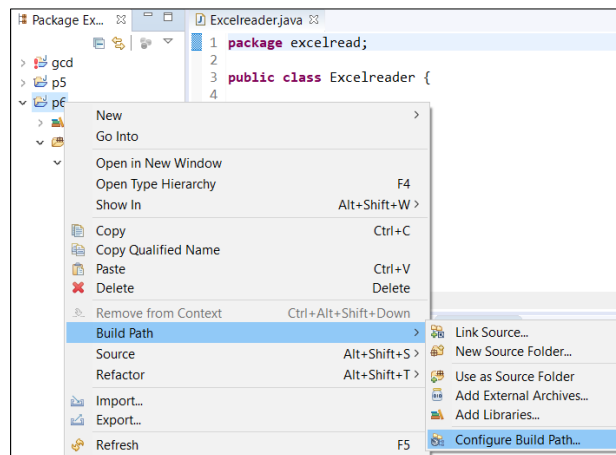


6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):

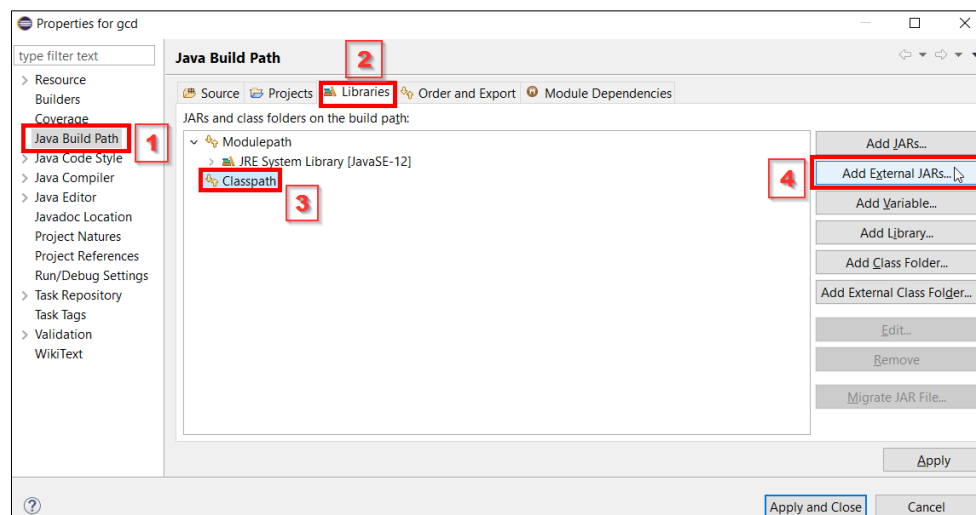


7) Adding “JXL(JAR file)” in Eclipse IDE:

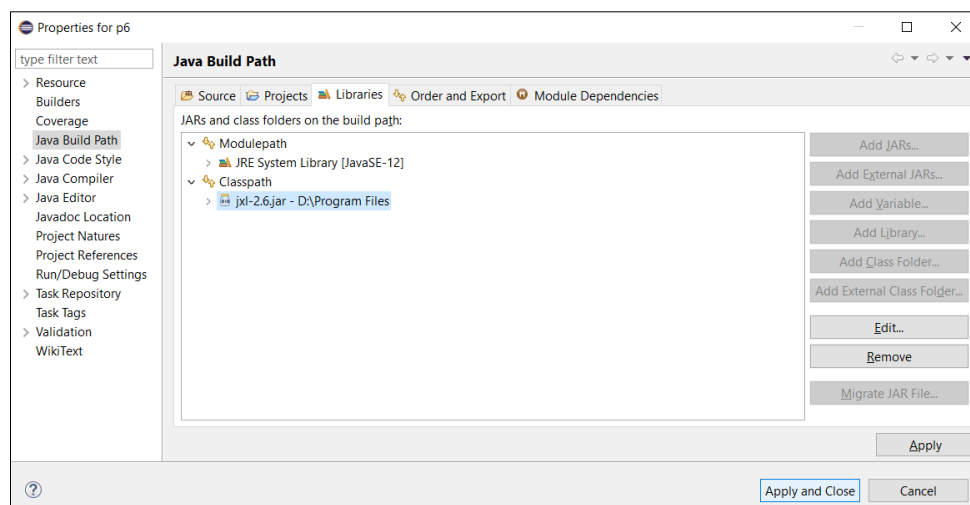
- **right-click on Project Name > Build Path > Configure Build Path...**



- **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 opening .xls file

-and fetching the marks count ≥ 60 from the cells with the help of jxl.jar

-and to show the result.

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

---(Excelreader.java)---

```
package excelread;

import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.CellType;
import jxl.Sheet;
import jxl.Workbook;
import jxl.read.biff.BiffException;

public class Excelreader {
    private String inputFile;
    public void setInputFile(String inputFile) {this.inputFile = inputFile;}

    public void read() throws IOException {
        File inputWorkbook = new File(inputFile);
        Workbook w;
        boolean flag=false;
        int count=0;
        try {
            w = Workbook.getWorkbook(inputWorkbook);
            // Get the first sheet
            Sheet sheet = w.getSheet(0);
            // Loop over first 10 column and lines
            for (int j = 0; j < sheet.getRows(); j++) {
                for (int i = 0; i < sheet.getColumns()-1; i++) {
                    Cell cell = sheet.getCell(i, j);
                    if (cell.getType() == CellType.NUMBER) {

if(Integer.parseInt(cell.getContents())>=60){
                        flag = true;
                        if(flag == true){
                            count++;
                            flag=false;
                        }
                        break;
                    }
                }
            }
            System.out.println("Total number of students who scored more
than 60 in one or more subjects: " +count);
        }
        catch (BiffException e) {e.printStackTrace();}
    }
}
```

```

    public static void main(String[] args) throws IOException {
        Excelreader test = new Excelreader();
        test.setInputFile("C:\\Users\\Usman\\eclipse-
workspace\\p5\\student.xls");
        test.read();
    }
}

```

9) Run the file from Eclipse IDE:

- **OUTPUT:**

The screenshot shows the Eclipse IDE environment. On the left, a file explorer displays the project structure, including a file named 'student.xls'. A red arrow points to this file with the label 'opens and reads the data'. In the center, the 'Excelreader.java' file is open in the editor, showing the code for reading the Excel file. A red arrow points to the code with the label 'our program'. On the right, the 'Console' view shows the output of the program: 'Total number of students who scored more than 60 in one or more subjects: 6'. A red arrow points to this output with the label 'fetches the count'. Below the console, a table displays the data from the Excel file, with the total score for each student highlighted in pink.

Student Name	Subject1	Subject2	Subject3	Total
Carls	50	50	50	150
James	45	45	45	135
Paul	60	60	60	180
Philip	55	55	55	165
Smith	70	70	70	210
Thomson	45	45	45	135
Rhodey	67	67	67	201
Stark	78	78	78	234
Gary	89	89	89	267
AnneMarie	90	90	90	270

10) Finish!