Assignment 3

Before attempting this project, be sure you have completed all of the reading assignments, non-graded exercises, discussions, and assignments to date.

Write a Java program to calculate a gamer's total XP score with a bonus per level. The program should:
(1) Prompt and read user's input for the gamer's name, Level 1 XP (L1), Level 2 XP (L2), Level 3 XP (L3), and Engagement score (ES). User Scanner to read input.
(2) Each XP score input should be in whole numbers between 10-100 and in increments of 5.
The total XP score with bonuses should be calculated as follows:

L1+L1*0.20+L2+L2*0.30+L3+L3*0.50+ES+ES*0.60

(3) Output the gamer's information and the total calculated XP score (including bonuses).
(4) Prompt the user as to whether they want to calculate total XP for another gamer and repeat the input/output processing
(5) Allow user to exit the program without inputting gamer's data

Test program:
A minimum of 3 test cases should be supplied in the form of a table with columns indicating the input values, expected output, actual output, and if the test case passed or failed. This table shouldcontain 4 columns with appropriate labels and a row for each test case. An example template is shown below. Note that the actual output should be the actual results you receive when running your program and applying the input for the test record.

The three minimum test cases should include:
(1) Run for one gamer's data
(2) Run for another gamer's data
(3) Start program but select to exit without inputting gamer's data

Make sure your Java program is using the recommended style such as:

- Javadoc comment upfront with your name as author, date, and brief purpose of the program
- Comments for variables and blocks of code to describe major functionality
- Meaningful variable names and prompts
- Identifiers are written in upper CamelCase
- Class name starts with upper case letter and variables in lower case letter
- Constants are written in All Capitals
- Use proper spacing and empty lines to make code human-readable

Capture execution:
You should capture and label screen captures associated with compiling your code and running each of your 3 test cases.

Here are a couple of sample runs:

RUN1:

```
Welcome to the Total XP calculation program!
```

```
Do you want to enter gamer's data? Yes/No => Yes
Enter gamer's name => Mark Smith
Enter gamer's Level XP scores separated by space: L1 L2 L3 ES =>  90 90 80 75

Gamer Name: Mark Smith L1=90 L2=90 L3=80 ES=75
Final XP score with bonuses=465

Do you want to enter another gamer's data? Yes/No => Yes
Enter gamer's name => Sara Parker
Enter gamer's Level XP scores separated by space: L1 L2 L3 ES =>  75 85 85 75


Gamer Name: Sara Parker L1=75 L2=85 L3=85 ES=75
Final XP score with bonuses=448

Do you want to enter another gamer's data? Yes/No => No

Thank you for using the Total XP calculation program!
```

RUN2:

```
Welcome to the Total XP calculation program!

Do you want to enter gamer's data? Yes/No => No

Thank you for using the Total XP calculation program!
```

Example test cases:

Input	**Expected Output**	**Actual Output**	**Pass?**
Name=Mark Smith L1=90 L2=90 L3=80 ES=75 Name=Sara Parker L1=75 L2=85 L3=85 ES=75	Student Name: Mark Smith Level 1=90 Level 2=90 Level 3=80 Engagement=75 Total XP + Bonus=465 Student Name: Sara Parker Level 1=75 Level 2=85 Level 3=85 Engagement=75 Total XP + Bonus=448	Student Name: Mark Smith Level 1=90 Level 2=90 Level 3=80 Engagement=75 Total XP + Bonus=465 Student Name: Sara Parker Level 1=75 Level 2=85 Level 3=85 Engagement=75 Total XP + Bonus=448	Yes
Test Case 2			
Test Case 3			

Submission requirements

Deliverables include a Java program (.java) and a single Word (or PDF) document. The Java and Word/PDF files should be named appropriately for the assignment (as indicated in the Submission Requirements document.

The word (or PDF) document should include screen captures showing the successful compiling and running of each of the test cases. Each screen capture should be properly labeled and indicate what the screen capture represents. The test cases table should be included in your Word or PDF document and properly labeled as well.

Submit your files to the Assignment 3 submission area no later than the due date listed in your online classroom.

Grading Rubric:
The following grading rubric will be used to determine your grade:

Attribute	**Level (15-20 points)**	**Level (5-15 points)**	**Level 0 (0 - 5 points)**
User input and loop	Correct or one incorrect prompt and captured input and loop code	Two mistakes in prompts and/or capture of input and/or loop	Three or more missing essential elements for user input and/or loop
Calculation	Correct or one mistake in calculation	Two mistakes in calculations	Three or more missing or significantly incorrect calculations
Application output	Correct or one mistake in output	Two mistakes in output data or format	Three or more missing or significantly incorrect output
Test Cases	Correct or one incorrect test case and/or test execution	Two incorrect or incomplete test cases and/or test execution	Three or more missing or significantly incorrect or incomplete test cases
Program documentation and style	Correct or one missing program comment, identifier, and/or screen capture	Two incorrect or incomplete documentation and/or style elements	Three or more missing or significantly incorrect documentation and/or style elements