**Technical Design Document Exercise CSV**

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**Program Description:** This program allows the user to enter a paragraph that may include sentences beginning with numbers. It uses regular expressions to split the paragraph into individual sentences, displays each sentence on its own line, and then prints the total number of sentences found.

**Functions used in the Program (list in order as they are called):**

### **1. Function Name: ​​**write\_grades\_to\_csv()

**Description:** Prompts the user to enter the number of students, each student’s name, and three exam grades. Writes the data to a file named **grades.csv** with headers.

**Parameters:** None

**Variables:**

1. 1.filename - stores the name of the CSV file.
2. num\_students - stores how many students the instructor wants to enter.
3. first,last - store the first and last names of each student.
4. exam1, exam2, exam3 - store each exam grade as an integer.

**Logical Steps:**

1. Open the file grades.csv in write mode using the **with** statement.
2. Write the header row to the CSV file.
3. Ask the user how many students to enter.
4. Use a loop to collect each student's data.
5. Write each student’s record as a new row in the CSV file.
6. Display a message confirming the data was saved.

**Returns:** Writes data to file.

**2. Function Name:** read\_grades\_from\_csv()

**Description:** Reads the contents of **grades.csv** and displays the data in a formatted table.

**Parameters:** None

**Variables:**

1. filename - stores the name of the CSV file.
2. reader - CSV reader object that reads rows from the file.
3. rows - a list containing all rows from the CSV file.

**Logical Steps:**

1. Open the file **grades.csv** in read mode using the with statement.
2. Read all rows using **csv.reader()**.
3. Display a formatted table header for first name, last name, and exam grades.
4. Print a separator line for readability.
5. Loop through each record and print the data in aligned columns.

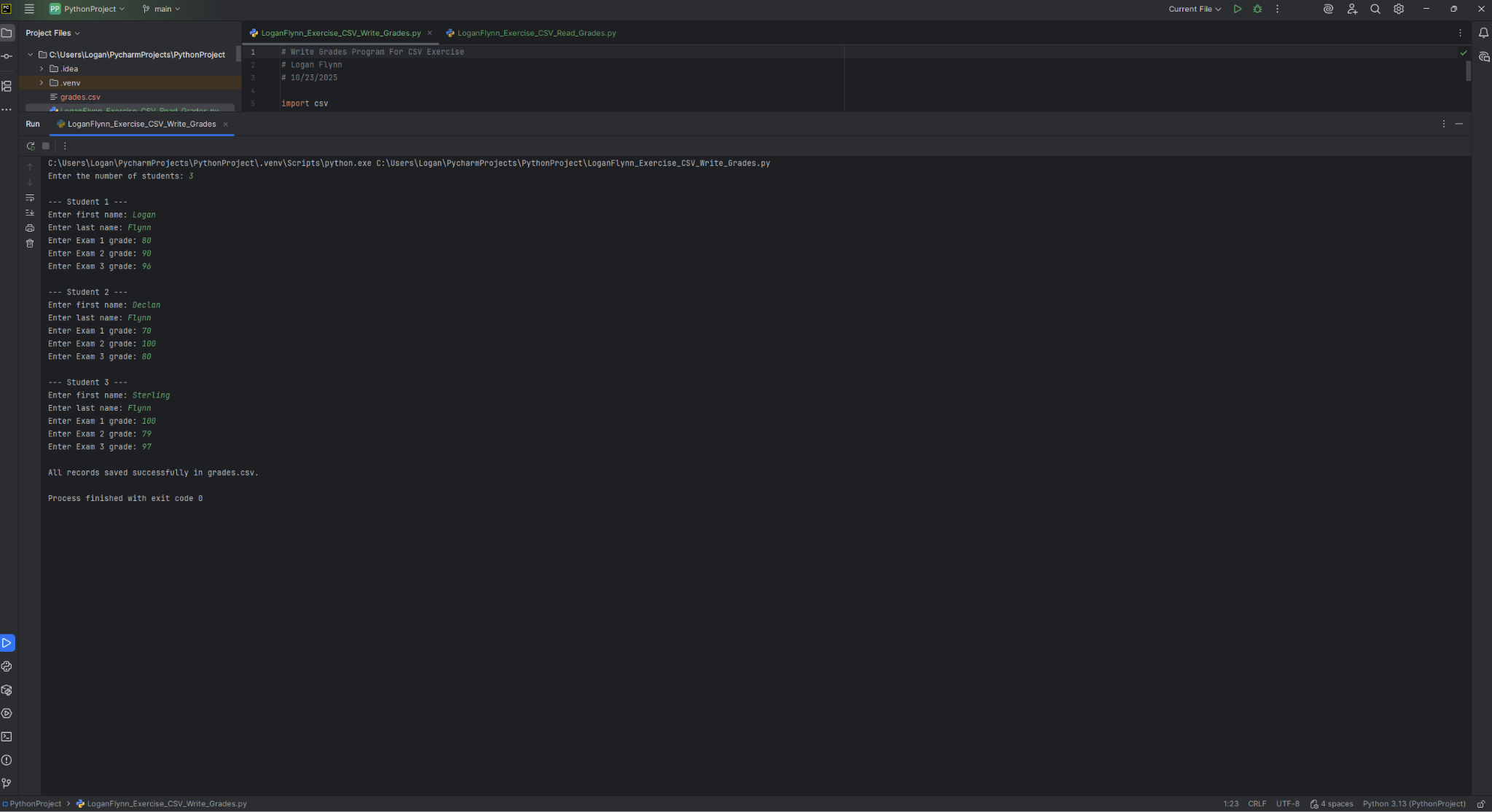
**Returns:** Prints formatted table to the screen.

**Constants:** None

**Link to your repository:**

[loganflynnn (Logan Flynn)](https://github.com/loganflynnn)

**Output Screenshot:**

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