

Assignment: Student Marks Processing

Objective

In this assignment, you will read a CSV file containing student information and their marks in different subjects. You will then write a Python program that calculates:

1. A dictionary with the total marks obtained by each student.
2. A dictionary showing the highest marks obtained by any student.

Instructions

1. **Download the Sample CSV File**

The CSV file contains the following data:

Student ID	Student Name	Subject	Marks
101	Alice	Math	85
102	Bob	Science	90
101	Alice	Science	78
103	Charlie	Math	88
102	Bob	Math	76
103	Charlie	Science	95

2. Save this data as `students.csv`.

3. **Write a Python Program**

- Read the CSV file using the `csv` module.
- Process the data to calculate:
 - **Total Marks Dictionary:** `{Student Name: Total Marks}`
 - **Highest Marks Dictionary:** `{Student Name: Highest Marks}`
- Print both dictionaries.

4. **Expected Output**

If your program runs correctly on the given data, it should output something like:

```
python
CopyEdit
Total Marks: {'Alice': 163, 'Bob': 166, 'Charlie': 183}
Highest Marks: {'Alice': 85, 'Bob': 90, 'Charlie': 95}
```

Hints & Resources

- Use Python's `csv` module to read the file.
- Use dictionaries to store and update student marks.
- To calculate total marks, add up all subject marks for each student.
- To find the highest marks, track the maximum marks each student has scored in any subject.

Bonus Challenge

- Allow the user to input a student's name and display their total and highest marks.