# Student Class Assignment

#### Overview

Create a Student class that stores and manages student information including name and grade.

### Requirements

#### Class Structure

Your Student class should have the following methods:

```
1. __init__()
```

- o Initialize a student with a name and grade
- Store both name and grade as instance variables

```
2. get_name()
```

Return the student's name

```
3. get_grade()
```

Return the student's grade

```
4. set_grade()
```

- o Update the student's grade to the new value
- Modify the instance variable directly

# **Expected Behavior**

#### Example Usage

PROFESSEUR: M.DA ROS

```
# Create a student
student = Student("Alice", 85)
print(student.get_name())  # Should output: "Alice"
print(student.get_grade())  # Should output: 85

# Update the grade
student.set_grade(90)
print(student.get_grade())  # Should output: 90

# Access attributes directly
print(student.name)  # Should output: "Alice"
print(student.grade)  # Should output: 90

# Create multiple students
student1 = Student("Bob", 92)
```

```
student2 = Student("Charlie", 78)

print(student1.get_name())  # Should output: "Bob"
print(student2.get_grade())  # Should output: 78
```

#### **Test Cases**

Your implementation should pass all the following test cases:

- 1. Student creation: Create student with name and grade, verify both are stored correctly
- 2. Get name: Method returns the correct student name
- 3. Get grade: Method returns the correct student grade
- 4. Set grade: Method updates the grade and both direct access and getter return new value
- 5. Different grades: Multiple students can have different grades
- 6. Grade updates: Multiple grade updates work correctly
- 7. String name: Student name is stored as a string
- 8. Numeric grade: Student grade is stored as a number

### Implementation Tips

- Store both name and grade as instance variables
- The set\_grade() method should modify the instance variable directly
- Both getter methods should return the stored values
- Make sure your class follows the exact method signatures shown above
- The class should be simple and straightforward no complex validation needed

# **Data Types**

- Name: Should be a string
- **Grade**: Should be a number (int or float)