# QAP 3 \_ Java

1. How many hours did it take you to complete this assessment?

Estimated total time: ~4-5 hours

Breakdown per problem:

Problem 1 (Inheritance - Person, Student, Teacher, CollegeStudent): ~2 hours

Problem 2 (Point and MovablePoint - Inheritance & Encapsulation): ~1 hours

Problem 3 (Abstract Classes - Shape Hierarchy): ~1 hours

Problem 4 (Interfaces - Scalable Shapes): ~1 hours

2. What online resources did you use?

I referred to class lectures, and various Youtube videos if required.

3. Did you need to ask any of your friends for help?

No, I worked on this independently with online resources.

4. Did you need to ask questions to any of your instructors?

No direct questions to instructors, but I relied on online resources and explanations for debugging and clarifications.

5. Rate the difficulty of each question and confidence level:

**Problem 1** (Inheritance - Person, Student, Teacher, CollegeStudent)

Difficulty 3/5, Confident in handling class hierarchies and constructors.

**Problem 2** (Point and MovablePoint - Encapsulation & Inheritance)

Difficulty 2/5, Comfortable with getters/setters, subclassing, and overriding methods.

**Problem 3** (Abstract Classes - Shape Hierarchy)

Difficulty 4/5. Now confident with abstract classes, polymorphism, and calculating properties.

**Problem 4** (Interfaces - Scalable Shapes)

Difficulty 4/5, Stronger understanding of interfaces and scaling logic.

**Screenshots of Answers:**

**Problem #1**

**A screen shot of a computer code

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**Problem #2**

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**Problem #3**

**A screenshot of a computer program

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**Problem #4**

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