

# QAP – 2 – JAVA

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ADVANCED PROGRAMMING (JAVA)

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## SCREENSHOTS OF RUNNING CODE'S OUTPUT

### 1. Problem 1:

```
● harini@MacBookAir QAP2_Java % cd /Users/harini/Desktop/QAP2_Java
● harini@MacBookAir QAP2_Java % javac -d . src/line_app/MyPoint.java src/line_app/MyLine.java src/line_app/TestMyLine.java
● harini@MacBookAir QAP2_Java % java line_app.TestMyLine
Point 1: (3, 4)
Point 2: (6, 8)
Distance between points: 5.0

Line 1: Line[Begin=(3, 4), End=(6, 8)]
Length of Line 1: 5.0

Line 2: Line[Begin=(0, 0), End=(5, 5)]
Length of Line 2: 7.0710678118654755
○ harini@MacBookAir QAP2_Java %
```

### 2. Problem 2:

```
● harini@MacBookAir QAP2_Java % cd /Users/harini/Desktop/QAP2_Java
● harini@MacBookAir QAP2_Java % mkdir -p src/rectangle_app
● harini@MacBookAir QAP2_Java % cd /Users/harini/Desktop/QAP2_Java
● harini@MacBookAir QAP2_Java % javac -d . src/line_app/MyPoint.java src/rectangle_app/MyRectangle.java src/rectangle_app/TestMyRectangle.java
● harini@MacBookAir QAP2_Java % java rectangle_app.TestMyRectangle
Rectangle 1: Rectangle[TopLeft=(2, 10), BottomRight=(8, 4), Width=6, Height=6]
Width: 6, Height: 6
Area: 36, Perimeter: 24

Rectangle 2: Rectangle[TopLeft=(0, 5), BottomRight=(6, 0), Width=6, Height=5]
Width: 6, Height: 5
Area: 30, Perimeter: 22
○ harini@MacBookAir QAP2_Java %
```

### 3. Problem 3:

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● harini@MacBookAir QAP2_Java % cd /Users/harini/Desktop/QAP2_Java
● harini@MacBookAir QAP2_Java % javac -d . src/credit_app/*.java
● harini@MacBookAir QAP2_Java % java credit_app.TestCreditCard
CreditCard[Owner=Doe John, 123 Main St, Springfield, IL 62704, Balance=$0.00, CreditLimit=$1000.00]
Charge: $200.50
Exceeds credit limit
Payment: $100.25
CreditCard[Owner=Doe John, 123 Main St, Springfield, IL 62704, Balance=$100.25, CreditLimit=$1000.00]
● harini@MacBookAir QAP2_Java % cd /Users/harini/Desktop/QAP2_Java
javac -d . src/credit_app/CreditCardDemo.java
java credit_app.CreditCardDemo
Christie Diane, 237J Harvey Hall, Menomonie, WI 54751
Balance: $0.00
Credit Limit: $1000.00

Attempt to charge $200.00
Charge: $200.00
Balance: $200.00
Attempt to charge $10.02
Charge: $10.02
Balance: $210.02
Attempt to pay $25.00
Payment: $25.00
Balance: $185.02
Attempt to charge $990.00
Exceeds credit limit
Balance: $185.02
○ harini@MacBookAir QAP2_Java %
```

## ANSWERS TO FEEDBACK QUESTIONS

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

Problem 1 (My Point & My Line)	2-3 hours
Problem 2 (My Rectangle)	2-3 hours
Problem 3 (Credit Card System)	3-4 hours

2. What online resources have you used?

- Course Lectures & Notes – Primary reference for Java syntax and OOP concepts.
- YouTube – For understanding Java object-oriented principles, particularly composition and aggregation.

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

- No, I did not ask any friends for help. I relied on online resources and careful debugging.

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

- No, I did not ask my instructors directly, but I used external resources to troubleshoot folder structure and package issues.

5. Difficulty Rating & Confidence Level

Problem	Difficulty	Confidence
Problem 1	4/10	High – Comfortable with basic OOP concepts.
Problem 2	5/10	Moderate to High
Problem 3	7.5/10	Moderate – Multiple interacting classes required extra debugging