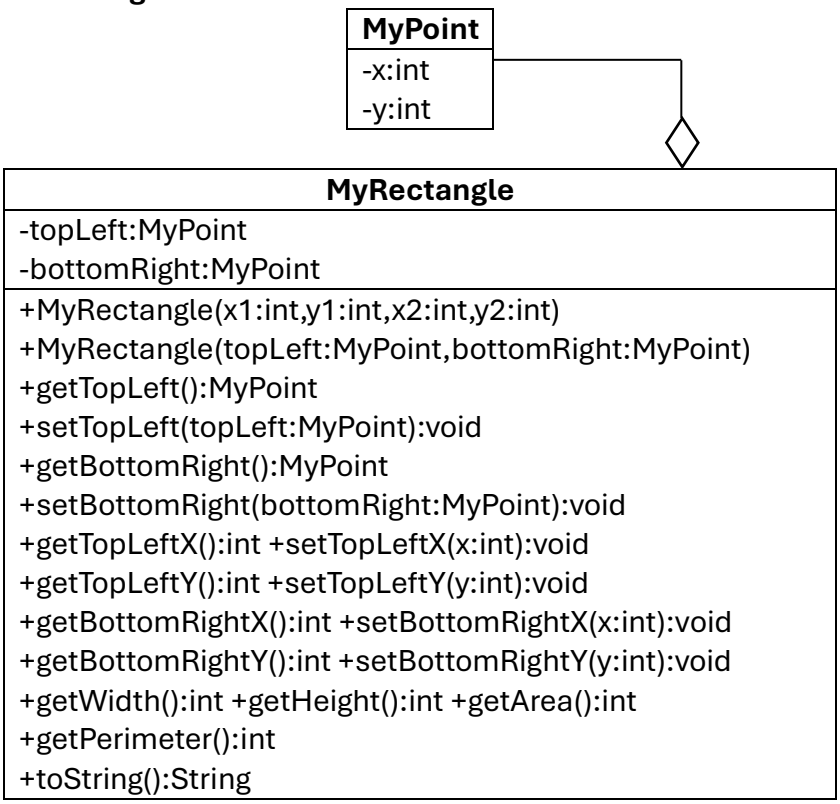
Advanced Programming (Java) – QAP #2

MyRectangle Class Diagrams



Output Screenshots:

```
MyLine[begin=(3,0),end=(8,0)]
MyLine[begin=(2,0),end=(2,4)]

Line one beginning point before modification: (3,0)
Line one beginning point after modification: (1,0)
Line one ending point before modification: (8,0)
Line one ending point after modification: (9,0)

Line two beginning X before modification: 2
Line two beginning X after modification: 1
Line two beginning Y before modification: 0
Line two beginning Y after modification: 9

Line two ending X before modification: 2
Line two ending X after modification: 9
Line two ending Y before modification: 4
Line two ending Y after modification: 7

Line one beginning XY before modification: (1, 0)
Line one beginning XY after modification: (5, 0)
Line one ending XY before modification: (9, 0)
Line one ending XY after modification: (15, 0)

Line one length: 10.0
Line two length: 8.246211251235321

Line one gradient: 0.0
Line two gradient: -0.24497866312686414

Line one: MyLine[begin=(5,0),end=(15,0)]
Line two: MyLine[begin=(1,9),end=(9,7)]
```

My Line My Point Class

```
Rectangle one top-left corner before modification: (0,4)
Rectangle one top-left corner after modification: (2,4)
Rectangle one bottom-right corner X value before modification: 12
Rectangle one bottom-right corner X value after modification: 10

Rectangle one width: 8 units
Rectangle one height: 4 units

Rectangle two width: 4 units
Rectangle two height: 2 units

Rectangle one area: 32 square units
Rectangle one perimeter: 24 units

Rectangle two area: 8 square units
Rectangle two perimeter: 12 units
```

My Rectangle My Point Class

```
Diane Christie, 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
Balance : $185.02
Attempt to charge $990.00
Sorry, this transaction would exceed your credit limit.
Balance : $185.02
```

Credit Card Class

Feedback Questions:

1. How many hours did it take you to complete this assessment? (Please keep try to keep track of how many hours you have spent working on each individual part of this assessment as best you can - an estimation is fine; we just want a rough idea.)

   - Approximately 4 hours coding. I have spent additional time reviewing lectures and notes.

2. What online resources you have used? (My lectures, YouTube, Stack overflow etc.)

   - Google searches which led me to Stack Overflow. Asked ChatGPT to clarify some concepts.

3. Did you need to ask any of your friends in solving the problems. (If yes, please mention name of the friend. They must be amongst your class fellows.)

   - No.

4. Did you need to ask questions to any of your instructors? If so, how many questions did you ask (or how many help sessions did you require)?

   - No.

5. Rate (subjectively) the difficulty of each question from your own perspective, and whether you feel confident that you can solve a similar but different problem requiring some of the same techniques in the future now that you've completed this one.

- On a scale of 1 (very easy) to 5 (very hard): 3.