

QAP 3 – Advanced Programming (Java)

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Due: March 16th

- 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.)**

Answer: This assessment took me around 12 hours to complete as I took my time and broke up the workload over a couple days, along with double checking all my work.

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

Answer: I mainly used the notes and lectures provided to us by Annie, but I did consult YouTube once or twice regarding interfaces.

- 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.)**

Answer: I did not need any helping figuring out the problems, but I did touch base with Christopher Meadus on problem three as I initially had a hard time understanding the requirements (just needed clarification is all)

- 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)?**

Answer: For this QAP, I did not need to ask the instructors any questions.

- 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.**

Answer: I felt that once you got started on this QAP, it was mostly straightforward. Subjectively, I found the questions easy going, some of them just required more time than others. On a difficulty scale, I'd rate this assignment a 6/10. I believe I can solve similar problems down the road using some of the same techniques.

Each Questions Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  GITLENS

● noahdevine@MacBookAir Problem1 % /usr/bin/env /Library/Java/JavaVirtualMachines/
  ication\ Support/Code/User/workspaceStorage/65e140d620a7b30e20a098cf3a376b76/redh
  Coach Bob, age: 27, gender: M
  Lynne Brooke, age: 16, gender: F, ID: HS95129, GPA: 3.5
  Duke Java, age: 34, gender: M, salary: $50000.0, subject: Computer Science
  Ima Frosh, age: 18, gender: F, ID: UCB123, GPA: 4.0, major: English, year: 1
○ noahdevine@MacBookAir Problem1 %
```

```
● noahdevine@MacBookAir Problem2 % /usr/bin/env /Library/Java/JavaVirtualMachines/amazon-corretto-11.
  ication\ Support/Code/User/workspaceStorage/151a889386afc0bb6cfa0f0c7f876cce/redhat.java/jdt_ws/Prob
  Point created with (x,y): (2.0, 3.0)
  Point coordinates using getX(): x=2.0, y=3.0
  Point after setXY(4.0f, 5.0f): (4.0, 5.0)

  MovablePoint created with position (1.0f,1.0f) and speed (0.5f,0.5f): (1.0,1.0), speed=(0.5,0.5)
  MovablePoint after first move: (1.5,1.5), speed=(0.5,0.5)
  New speeds using getSpeed(): xSpeed=1.0, ySpeed=-1.0
  MovablePoint after second move with new speeds: (2.5,0.5), speed=(1.0,-1.0)
○ noahdevine@MacBookAir Problem2 %
```

```
noahdevine@MacBookAir Problem3 % /usr/bin/ls -la /usr/bin/ls
iculation\ Support\Code\User\workspaceStorage\1\src\main\java\com\example\
Testing for the Different Shapes:

Shape: Circle
Area: 78.54
Perimeter: 31.42

Shape: Triangle
Area: 6.00
Perimeter: 12.00

Shape: Ellipse
Area: 75.40
Perimeter: 31.73

Shape: Equilateral Triangle
Area: 15.59
Perimeter: 18.00

noahdevine@MacBookAir Problem3 %
```

```
noahdevine@MacBookAir Problem4 % /usr/bin/echo  
ication\ Support\Code\User\workspaceStorage\  
Original Shapes:
```

```
Shape: Circle  
Area: 78.54  
Perimeter: 31.42
```

```
Shape: Triangle  
Area: 6.00  
Perimeter: 12.00
```

```
Shape: Ellipse  
Area: 75.40  
Perimeter: 31.73
```

```
Shape: Equilateral Triangle  
Area: 15.59  
Perimeter: 18.00
```

```
Shapes after scaling by factor of 2.0:
```

```
Shape: Circle  
Area: 314.16  
Perimeter: 62.83
```

```
Shape: Triangle  
Area: 24.00  
Perimeter: 24.00
```

```
Shape: Ellipse  
Area: 301.59  
Perimeter: 63.46
```

```
Shape: Equilateral Triangle  
Area: 62.35  
Perimeter: 36.00
```

```
noahdevine@MacBookAir Problem4 %
```