Assignment 3   CSSE3100/7100 Reasoning about Programs

Personal feedback   *Mohammad Faiz Ather*

2 marks were taken off if one or more of the following were violated:
- should not iterate over either array once a tangent has been found
- should not iterate over array x once it can be deduced that no tangent will be found for a given circle
- must not use return or break statements

(a) Tangent

In accordance with ITEE policy, you cannot be awarded marks for work that is not your own, therefore the any code that is within the referenced binary search method cannot receive any marks.

Pre and postconditions (1.5 marks):

The numbers below refer to the indicated lines in the sample solution. Each is worth 0.5 marks.

1	✓	Redundant precondition but doesn't really matter
2	✓	
3	✓	

Your mark: *1.5*

Loop invariants (4.5 marks): ✗

4	✓	
5	✓	
6	✓	
7	✓	
8	✓	
9	✗	Marks 9 – 12 exist within the referenced code
10	✗	
11	✗	
12	✗	

Your mark: *2.5*

Termination metrics (1.5 marks) :

1^T	✓	

2^T	✗	Within referenced code
3^T	✗	Within referenced code

Your mark: 0.5

Code (2.5 marks):

1^C	✓	
2^C	✗	Within referenced code
3^C	✗	Within referenced code
4^C	✓	
5^C	✓	

Your mark: 1.5

(b) Intersection Points   (CSSE7100 students only)

Function definition (4 marks) :

1	✓	
2	✓	
3	✓	
4	✓	
5	✓	
6	✓	
7	✓	
8	✓	

Your mark: 0

CSSE7100 students' marks have been divided by 1.4 to get a total mark out of 10. Fractional marks have been rounded to the nearest 0.5 marks.

Total mark: 6