

CSCI2600 Quiz 4

Aaron Taylor

TOTAL POINTS

10 / 10

QUESTION 1

1 Question 1 4 / 4

- 0 Correct
- 0.5 7-->2
- 0.5 7-->8
- 4 Incorrect
- 2 Incomplete graph

QUESTION 2

2 Question 2 2 / 2

- 0 Correct
- 2 Incorrect

QUESTION 3

3 Question 3 2 / 2

- 0 Correct
- 2 Incorrect

QUESTION 4

4 Question 4 2 / 2

- 0 Correct
- 2 Incorrect

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Principles of Software Quiz 4

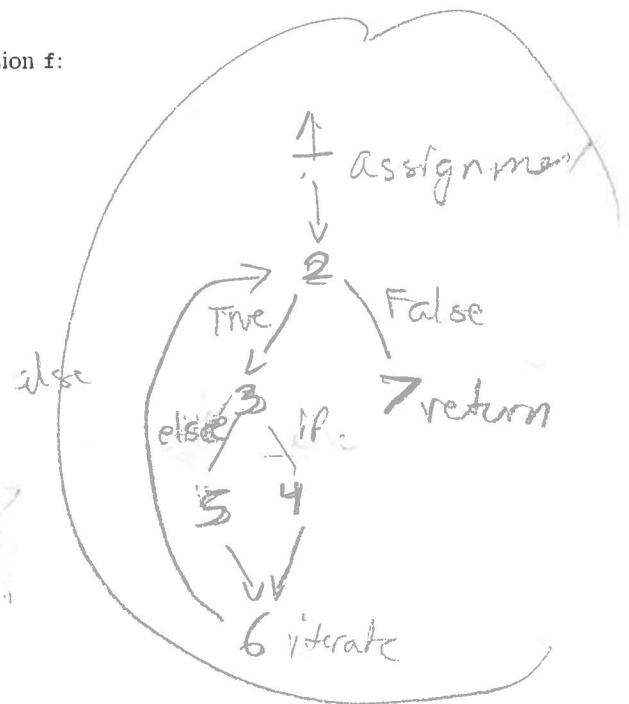
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10 points total

Question 1. (4pts) Draw the control flow graph (CFG) for function f:

```
int f(int y) {
1.   int s = 0;
   int x = 0;
2.   while (x < y) {
3.     x = x + 3;
     y = y + 2;
4.     if (x + y < 10)
5.       s = s + x + y;
     else
6.       s = s + x - y;
7.   } // end-if
   } // end-while
8.   return s;
}
```

Handwritten notes for Question 1:
 0
 2
 3
 5
 $6 = 5 + 3 + 8$
 $y = 1$
 $x =$



Question 2. (2pts) Is it possible to cover def-use pair (6,5)? (6 is a definition of s, 5 is a use of s and there is a definition-free path from 6 to 5).

- ☒ (a) no
- ☐ (b) yes

Question 3. (2pts) 100% statement coverage implies 100% branch coverage.

- ☐ (a) true
- ☒ (b) false

Question 4. (2pts) Black-box tests test specifications.

- ☒ (a) true
- ☐ (b) false