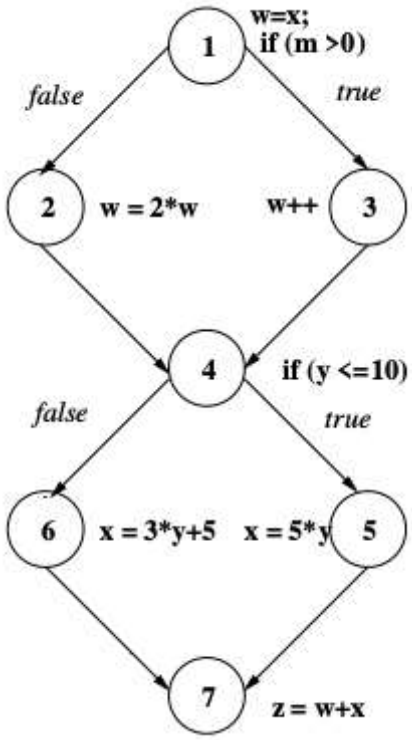
Answer Submitted.
X

Week 3 : Assignment 3 (Non Graded)

Assignment not submitted

Note : This assignment is only for practice purpose and it will not be counted towards the Final score

The following description is that of a CFG whose nodes are labelled with statements involving five different variables, namely, x, y, w, z and m. The CFG corresponds to a program fragment that has two decision statements. Answer the following questions with respect to this CFG and the definitions and uses of the variables, as per the statements.



1) Which of the following is a list of nodes having defs for variable w? ***1 point***

- (●) Nodes 1, 2, 3 have defs for w.
- ( ) Nodes 2 and 3 have defs for w.

Yes, the answer is correct.
Score: 1
Accepted Answers:
Nodes 1, 2, 3 have defs for w.

2) Which of the following is a list of nodes having uses for variable w? ***1 point***

- (●) Nodes 2, 3, and 7 have uses for w.
- ( ) Nodes 2 and 3 have uses for w.

Yes, the answer is correct.
Score: 1
Accepted Answers:
Nodes 2, 3, and 7 have uses for w.

3) State true or false: Nodes 4, 5 and 6 have uses for variable x. ***1 point***

- ( ) True
- (●) False

Yes, the answer is correct.
Score: 1
Accepted Answers:
False

4) ***1 point***

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State yes or no: Are there any du-paths with respect to variable w from node 1 to node 7?

- (●) Yes
- ( ) No

No, the answer is incorrect.
Score: 0
Accepted Answers:
No

5) Does the statement at node 7 correspond to a definition or a use for the variable z? ***1 point***

- (●) It corresponds to a definition of z.
- ( ) It corresponds to a use of z.

Yes, the answer is correct.
Score: 1
Accepted Answers:
It corresponds to a definition of z.

6) Which of the following is a list of du-paths for the variable w? ***1 point***

- ( ) Paths [2, 4, 5, 7], [2, 4, 6, 7], [3, 4, 5, 7] and [3, 4, 6, 7].
- (●) Paths [1, 2], [1, 3], [2, 4, 5, 7], [2, 4, 6, 7], [3, 4, 5, 7] and [3, 4, 6, 7].

Yes, the answer is correct.
Score: 1
Accepted Answers:
Paths [1, 2], [1, 3], [2, 4, 5, 7], [2, 4, 6, 7], [3, 4, 5, 7] and [3, 4, 6, 7].

7) Which of the following is a list of du-paths for the variable x? ***1 point***

- (●) Paths [5, 7] and [6, 7].
- ( ) Paths [5, 7], [6, 7] and [7, 7].

Yes, the answer is correct.
Score: 1
Accepted Answers:
Paths [5, 7] and [6, 7].

Check Answers and Submit

Your score is: 6/7