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In class Assignment 10

1. What is the set of initial nodes?

[1]

1. What is the set of final nodes?

[7]

1. Write one path in the graph that is not a test path.

[2, 3, 4]

1. Write one test path in the graph.

[1, 2, 6, 7]

1. List test paths that satisfy edge coverage.

Test edges = {(1,5),(5,5)\*(5,7)!,(1,2),(2,3),(3,4),(4,2),(2,6),(6,7)!}

Test paths = [1, 5, 5, 7], [1, 2, 3, 4, 2, 6, 7]

1. Write the set of test requirements for edge-pair coverage.

{(1,5,5)\*,(5,5,7)!,(1,5,7)!(1,2,3)(2,3,4)(3,4,2)(4,2,6)(2,6,7)!, (1,2,6), **(4,2,3)**

}

1. List test paths that satisfy edge-pair coverage.

[1,5,7], [1,5,5,7], [1,2,6,7], [1,2,3,4,2,6,7], **[1,2,3,4,2,3,4,2,6,7]**

1. Write the set of test requirements for prime path coverage.

Simple Paths:

Length 0: [1], [2], [3], [4], [5], [6], [7]

Length 1: [1,5], [5,5]\*, [5,7]!, [1,2], [2,3], [3,4], [4,2], [2,6], [6,7]!

Length 2: [1,5,7]!, [1,2,3], [2,3,4], [3,4,2], [4,2,6], [2,6,7]!, [1,2,6], **[4,2,3]**

Length 3: [1,2,6,7]!, [1,2,3,4], [3,4,2,6], [4,2,6,7], [2,3,4,2], **[3,4,2,3], [4,2,3,4]**

**Length 4: [3, 4, 2, 6, 7]!**

Prime Paths (Test requirements):

Length 1: [5, 5]\*

Length 2: [1, 5, 7]!

Length 3: [1, 2, 6, 7], [1, 2, 3, 4], [3, 4, 2, 6], [4, 2, 6, 7], [2, 3, 4, 2], **[3, 4, 2, 3], [4, 2, 3, 4]**

Length 4: **[3, 4, 2, 6, 7]**

1. List test paths that satisfy prime path coverage.

{

T1 = {1, 5, 7}

T2 = {1, 5, 5, 7}

T3 = {1, 2, 6, 7}

T4 = {1, 2, 3, 4, 2, 6, 7}

T5 = {1, 2, 3, 4, 2, 3, 4, 2, 6, 7}

}