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ESOF 422
HW 4
3/28/16

1.3

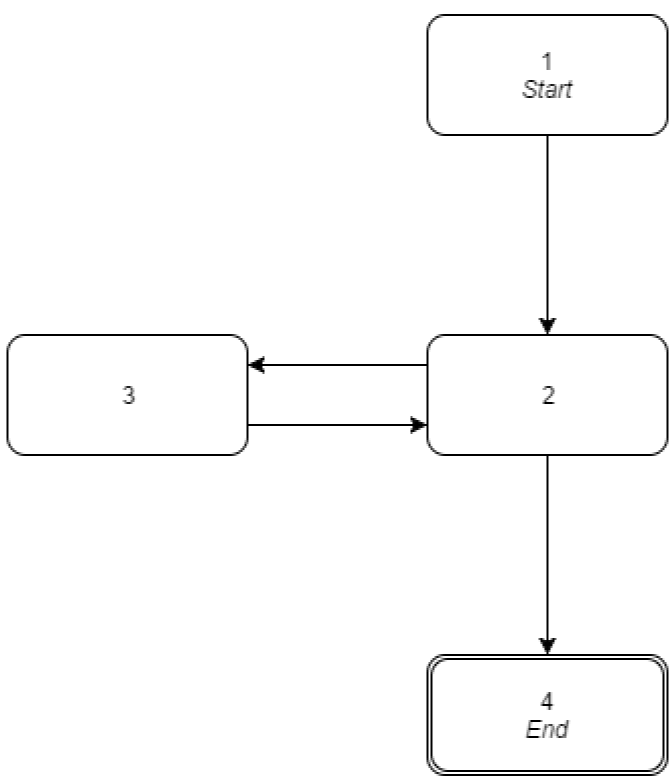
2. Coverage is also a relatively effective way of comparing tests, and as such, we could compare the relative coverage of each, as well as the efficiency of the coverage. This wouldn't be as conclusive as subsumption, but it would still be somewhat effective.

2.2.1

4. Sets:

$N = \{1, 2, 3, 4\}$
$N_0 = \{1\}$
$N_f = \{4\}$
$E = \{ (1,2), (2,3), (3,2), (2,4) \}$

a.



b. [1,2,4],[1,2,3]
c. [1,2,4],[3,2,4]
d. [1,2,3,4]

5. Sets:

$N = \{1,2,3,4,5,6,7\}$

$N_0 = \{1\}$

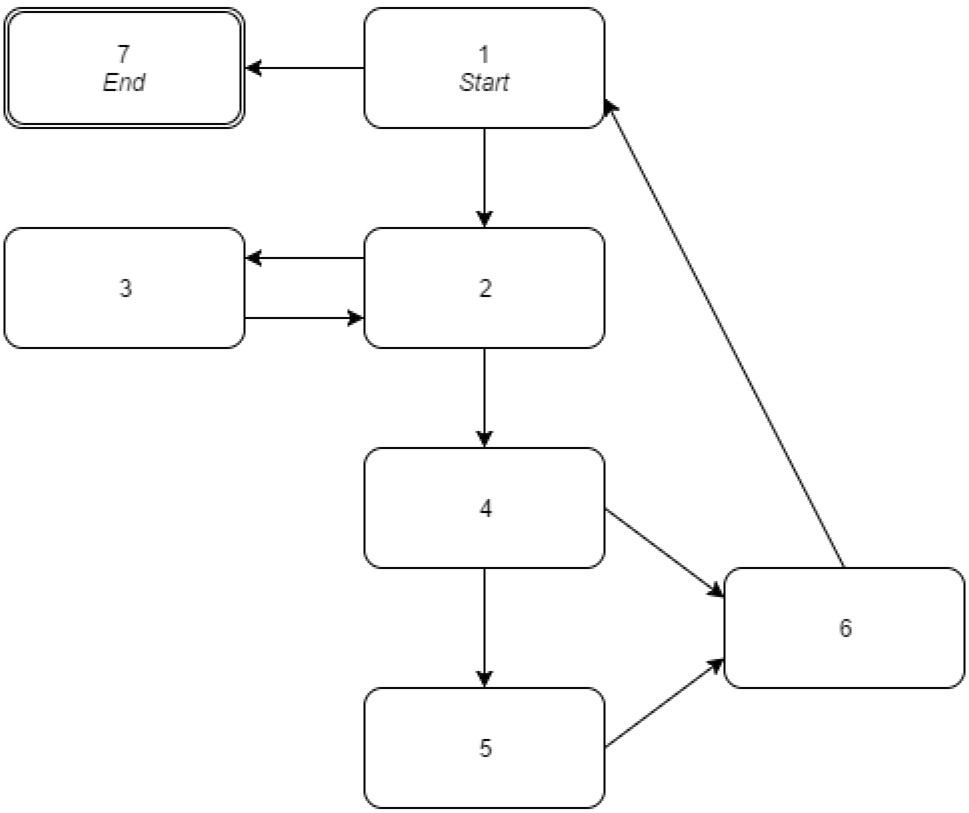
$N_f = \{7\}$

$E = \{ (1,2), (1,7), (2,3), (2,4), (3,2), (4,5), (4,6), (5,6), (6,1) \}$

$T_0 = [1, 2, 4, 5, 6, 1, 7]$

$T_1 = [1, 2, 3, 2, 4, 6, 1, 7]$

a.



b. { [1,2,3], [1,2,4], [1,7], [2,3,2], [2,4,5], [2,4,6], [3,2,3], [3,2,4], [4,5,6], [4,6,1], [5,6,1], [6,1,2], [6,1,7] }

c. No, we are still missing the paths [3,2,3] and [6,1,2].

d. No, it does not without a sidetrip. You can use the sidetrip [2,4,5,6,1,2] to complete it, however.

e.

Node: {1,2,3,4,5,6,7}

Edge: { (1,2),(1,7),(2,3),(2,4),(3,2),(4,5),(4,6),(5,6),(6,1) }

Prime Path: { [1,2,4,6,1],
[1,2,4,5,6,1],
[2,3,2],
[2,4,6,1,2],
[2,4,5,6,1,2],
[3,2,3],
[3,2,4,6,1,7],
[3,2,4,5,6,1,7],
[4,6,1,2,4],
[4,6,1,2,3],
[4,5,6,1,2,4],
[4,5,6,1,2,3],
[5,6,1,2,4,5],
[6,1,2,4,6],
[6,1,2,4,5,6] }

f. [1,2,3] and [4,5,6,1,7]

g. [1,2,3,2,4,6,1,7] and [1,2,4,5,6,1,7]