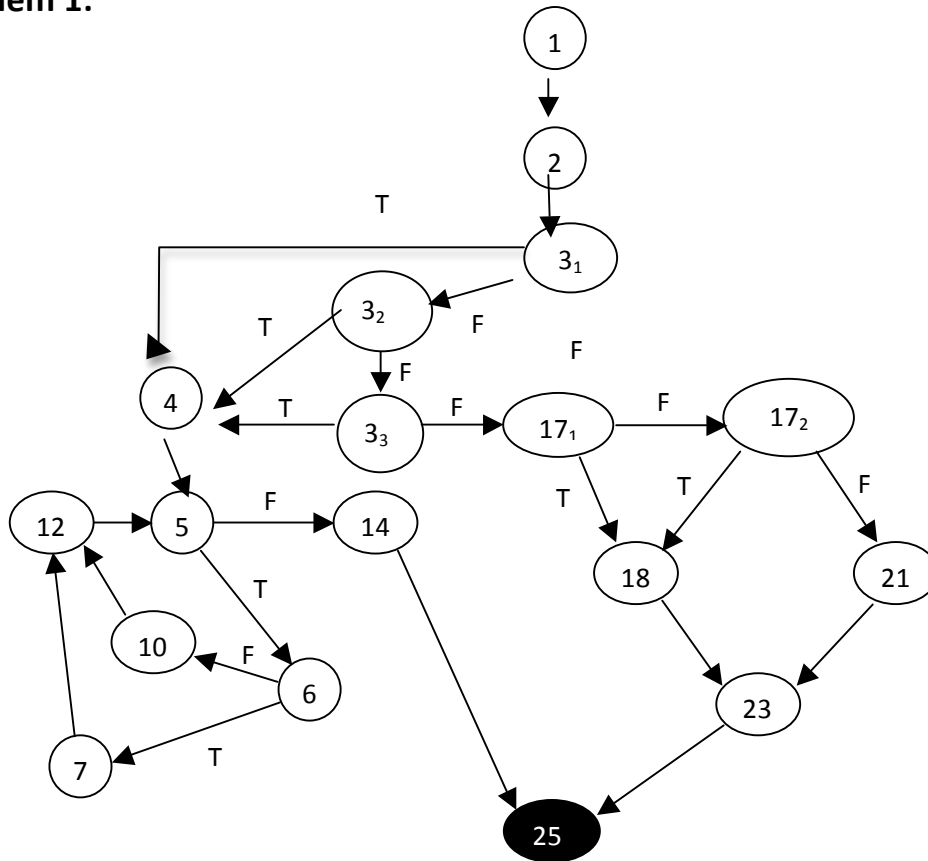


SQA Assignment 1 Solution - Spring 2016

Problem 1:



Cyclomatic Number:

(1) $|E| = 24; |V| = 18; V(G) = 24 - 18 + 2 = 8$

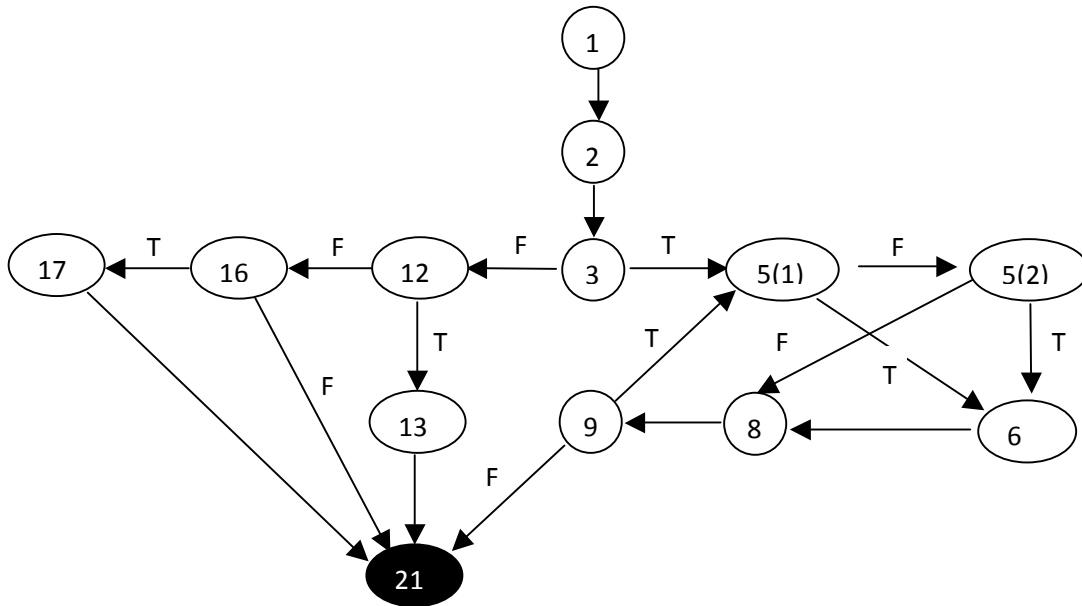
(2) Regions number = 7; $V(G) = 7 + 1 = 8$

(3) Conditions number = 7; $V(G) = 7 + 1 = 8$

P* =

$$(((1 * ((1 + 1) * 1) ^ 5))^3 + 3 = 99$$

Problem 2:



Cyclomatic Number:

(1) $|E| = 18; |V| = 13; V(G) = 18 - 13 + 2 = 7$

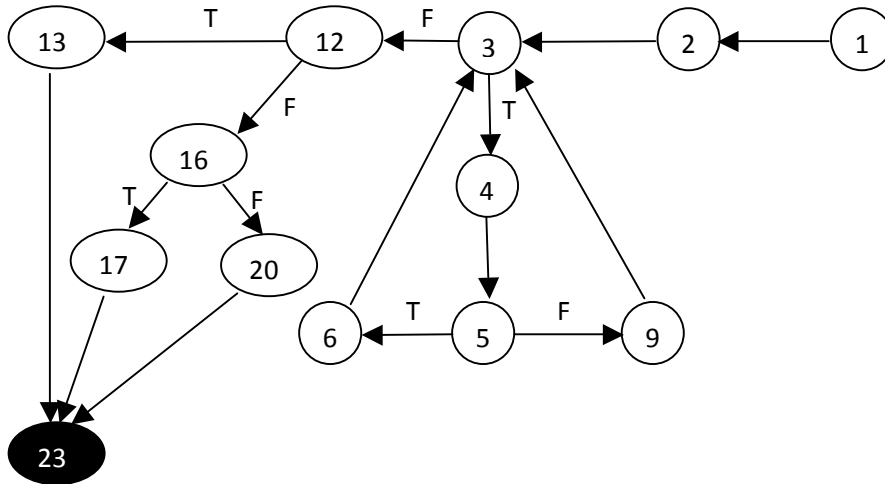
(2) Regions number = 6; $V(G) = 6 + 1 = 7$

(3) Conditions number = 6; $V(G) = 6 + 1 = 7$

P* =

$((1 * (1 + 1 + 1) ^ 3) + (1 + (1 + 1))) * 1 = 30$

Problem 3:



Cyclomatic Number:

(1) $|E| = 16; |V| = 13; V(G) = 16 - 13 + 2 = 5$

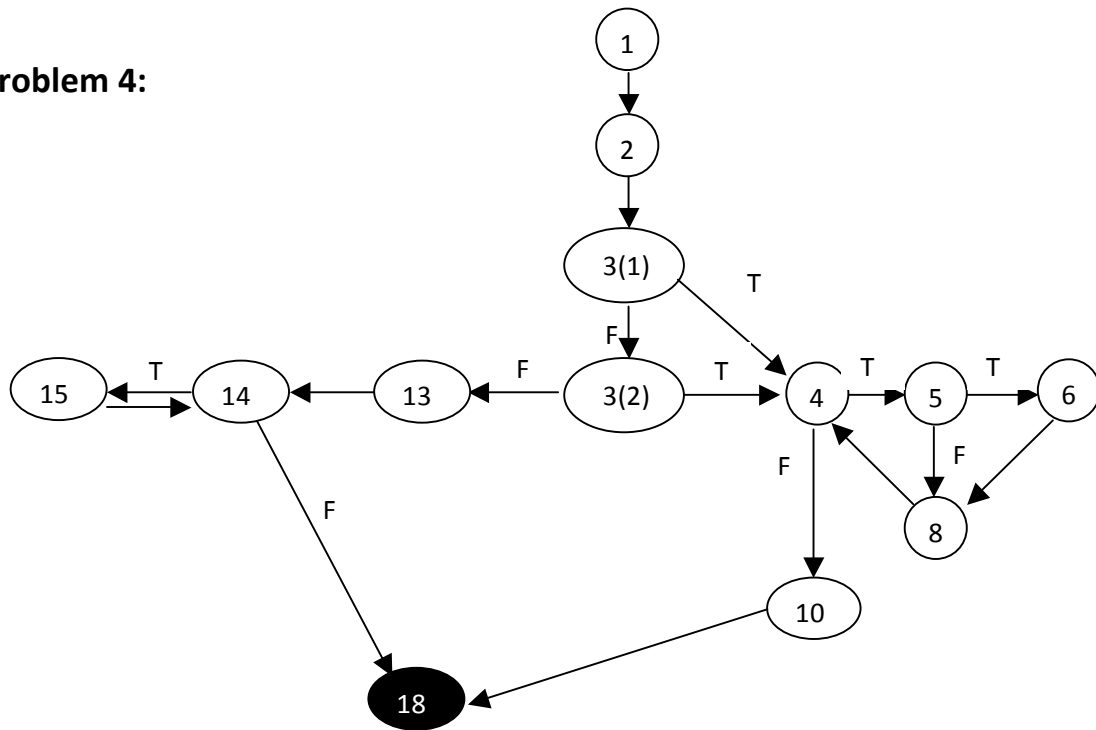
(2) Regions number = 4; $V(G) = 4 + 1 = 5$

(3) Conditions number = 4; $V(G) = 4 + 1 = 5$

$P^* =$

$$(((1 * (1 + 1))) ^ 10) * (1 + (1 + 1))) * 1 = 3072$$

Problem 4:



Cyclomatic Number:

(1) $|E| = 17$; $|V| = 13$; $V(G) = 17 - 13 + 2 = 6$

(2) Regions number = 5; $V(G) = 5 + 1 = 6$

(3) Conditions number = 5; $V(G) = 5 + 1 = 6$

$P^* = 2 * ((1 * ((1 + 1) ^ 5) * 1) + (1 * (1 ^ 1 + 1 ^ 2 + 1 ^ 3))) * 1 = 67$