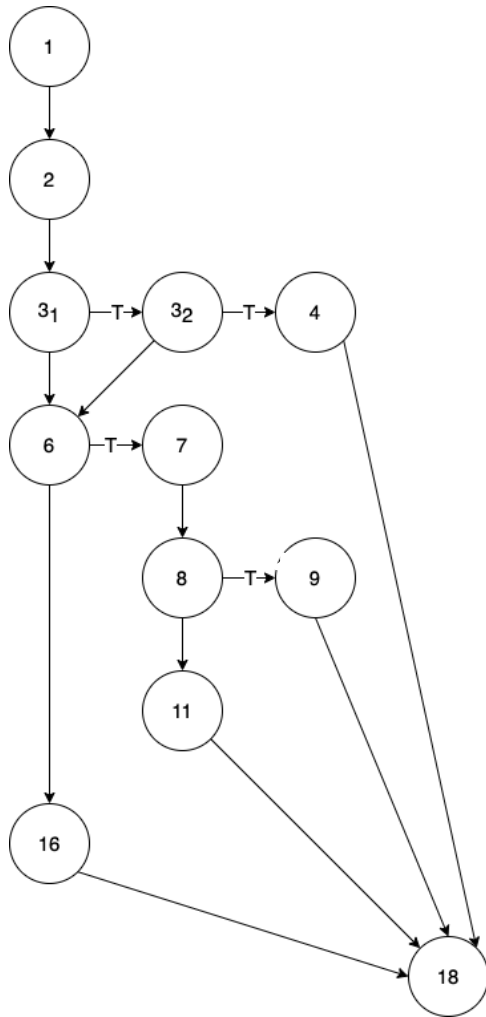


SQA Assignment 1 Solution – Fall 2020

1.



Cyclomatic Number:

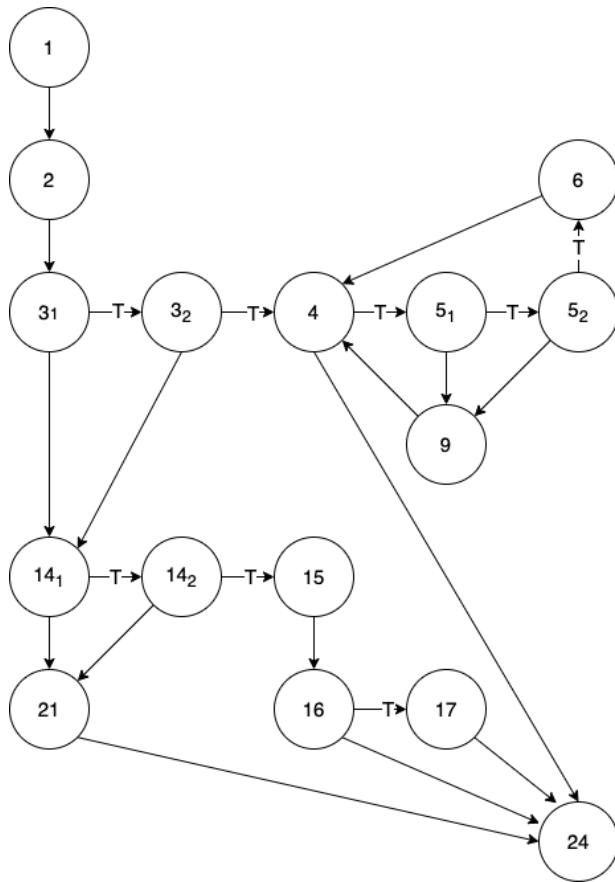
(1) $|E|=15$; $|V|=12$; $V(G)=15-12+2=5$

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

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

$P^*=1+2*(1+2)=7$

2.



Cyclomatic Number:

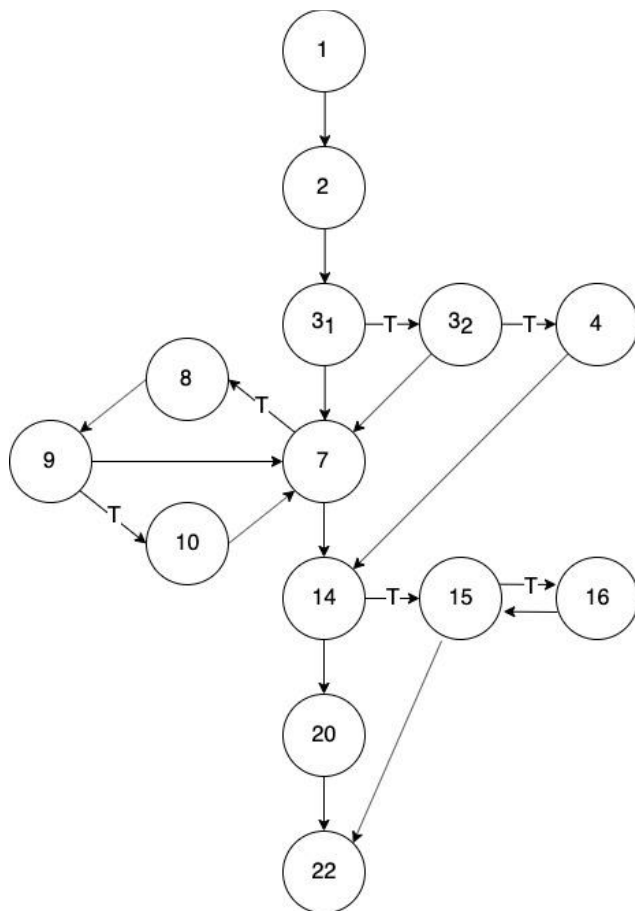
(1) $|E|=23$; $|V|=16$; $V(G)=23-16+2=9$

(2) Regions number=8; $V(G)=8+1=9$

(3) Conditions number=8; $V(G)=8+1=9$

$$P^* = (2*1 + 1)^3 + 2*(2*1 + 2) = 35$$

3.



Cyclomatic Number:

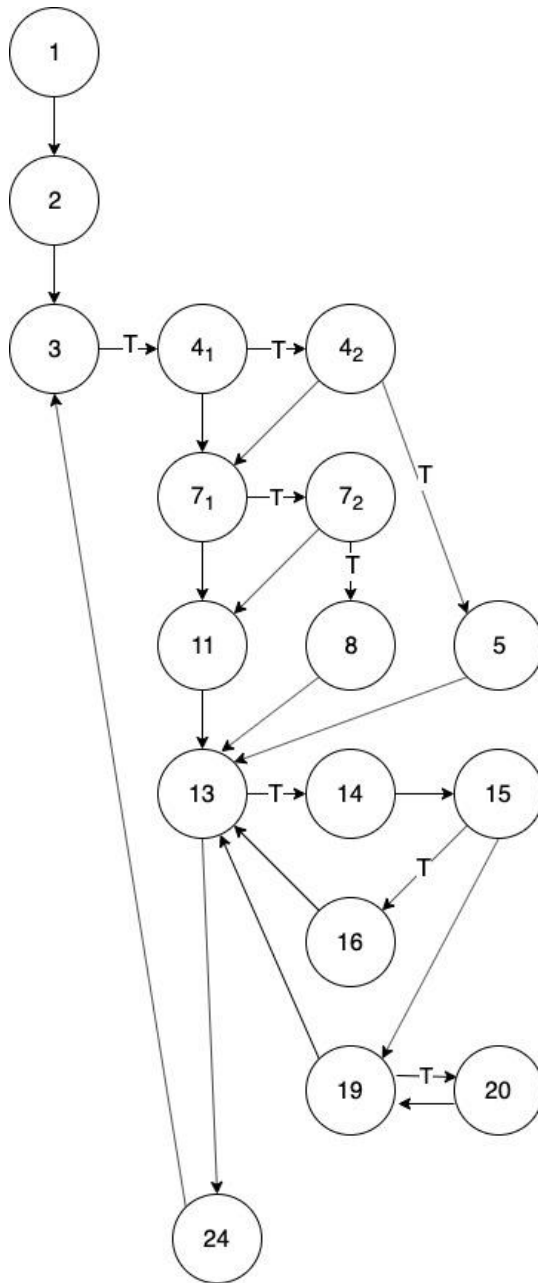
(1) $|E|=19$; $|V|=14$; $V(G)=19-14+2=7$

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

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

$$P^* = [1+2*(2^0+2^1+2^2+2^3)](1+1^3) = 124$$

4.



Cyclomatic Number:

(1) $|E|=24$; $|V|=17$; $V(G)=24-17+2=9$

(2) Regions number=8; $V(G)=8+1=9$

(3) Conditions number=8; $V(G)=8+1=9$

$P^*=[1+2*(1+2)]*(1+1)^2=784$

