



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SCHOOL OF COMPUTING
Faculty of Engineering

SECJ2203 SOFTWARE ENGINEERING

PROBLEM-SOLVING 3:

SOFTWARE VERIFICATION, VALIDATION & TESTING

Name & Matric No:

Section: 08

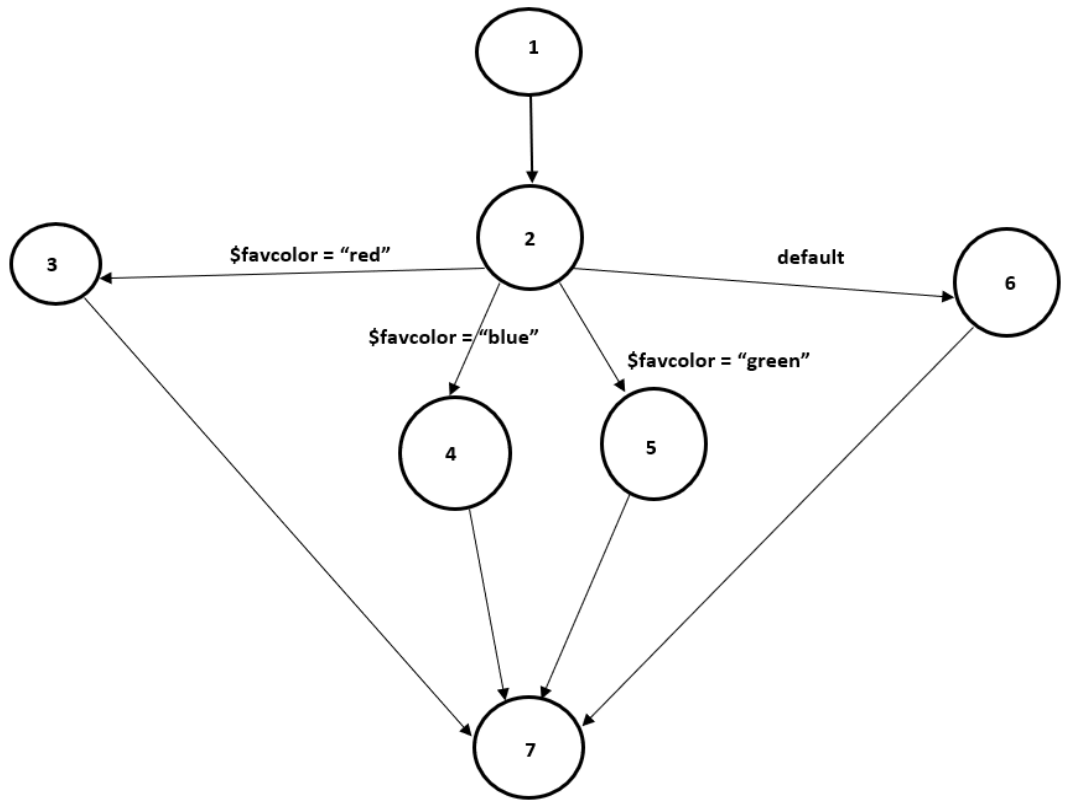
1. Nursyahidatul Asyiqin binti Yusof	A19EC0140
2. Nurul Syamira binti Amat Jifri	A19EC0145
3. PG. Khairil Qayyiz bin PG. Putra	A19EC0147
4. Qudri Ameer bin Mohd Safiee	A19EC0150

Question 1

Category	Equivalence Class	Status	Representative (BVA)	Expected Result
Low Voltage Commercial	First rate $\leq$ (200)	Valid	199	$199 * 0.40 = \text{RM}79.60$
	First rate $>$ (200)	Invalid	201	Invalid
	Second rate $\leq$ (200)	Invalid	199	Invalid
	Second rate $>$ (200)	Valid	201	$201 - 200 = 1$ $(200 * 0.40) + (1 * 0.50)$ $= \text{RM}80.50$
Low voltage Industrial	First rate $\leq$ (200)	Valid	199	$199 * 0.30 = \text{RM}59.70$
	First rate $>$ (200)	Invalid	201	Invalid
	Second rate $\leq$ (200)	Invalid	199	Invalid
	Second rate $>$ (200)	Valid	201	$201 - 200 = 1$ $(200 * 0.30) + (1 * 0.40)$ $= \text{RM}60.40$
Domestic	First rate $\leq$ (200)	Valid	199	$199 * 0.20 = \text{RM}39.80$
	First rate $>$ (200)	Invalid	201	Invalid
	Second rate $\leq$ (200)	Invalid	199	Invalid
	Second rate $>$ (200)	Valid	201	$201 - 200 = 1$ $(200 * 0.20) + (1 * 0.30)$ $= \text{RM}40.30$

Question 2

a)



b) $V(G) = 9 - 7 + 2 = 4$

c) **Independent Path:**

- i) 1 - 2 - 3 - 7
- ii) 1 - 2 - 4 - 7
- iii) 1 - 2 - 5 - 7
- iv) 1 - 2 - 6 - 7

d) Test case table

Independent Path	Data for Test Cases	Expected Result
1 - 2 - 3 - 7	&favcolor=red	Your fav color is red!
1 - 2 - 4 - 7	&favcolor=blue	Your fav color is blue!
1 - 2 - 5 - 7	&favcolor=green	Your fav color is green!
1 - 2 - 6 - 7	&favcolor=white	Your fav color is neither red, blue nor green!