

Question 2

Decision table:

	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5
Conditions					
\$5,000.01 <= premium (dollars) <= \$10,000.00	Y				
\$2,000.00 <= premium (dollars) <= \$5,000.00		Y			
\$1,250.01 <= premium (dollars) <= \$1,999.99			Y		
\$350.00 <= premium (dollars) <= \$1,250.00				Y	
\$0.00 <= premium (dollars) <= \$349.99					Y
Actions					
discount	0.2	0.15	0.10	0.05	0.00
Table implements "first-of" rule					

Test case table:

T e s t C a s e N u m b e r	Inputs						Expected outputs		Basis Path	MDCD stmt 26-34
	premium	polic yHol der	ye ar s M e m b e r	multi Polic ies	safe tyRa ting	taxRate	prim eStat us	totalPrem ium		
1	\$5,000.01	TRUE	5	TRUE	500	0.0825	TRUE	\$4,330.01	12-13-26-27-36	
2	\$2,000.00	TRUE	5	TRUE	500	0.0825	TRUE	\$1,840.25	12-15-16-26-27-36	
3	\$1,250.01	TRUE	5	TRUE	500	0.0825	TRUE	\$1,217.82	12-15-18-19-26-27-36	
4	\$350.00	TRUE	5	TRUE	500	0.0825	TRUE	\$359.93	12-15-18-21-22-26-27-36	
5	\$349.99	TRUE	5	TRUE	500	0.0825	TRUE	\$378.86	12-15-18-21-24-26-27-36	

6	\$349.99	FALS E	6	TRUE	500	0.0825	TRUE	\$378.86	12-15-18-21-24- 26-29-30-36	
7	\$349.99	FALS E	5	FALSE	500	0.0825	FALS E	\$378.86	12-15-18-21-24- 26-29-32-36	
8	\$349.99	FALS E	5	TRUE	500	0.0825	FALS E	\$378.86	12-15-18-21-24- 26-29-32-33-36	MCDC FFTF
9	\$349.99	FALS E	5	TRUE	501	0.0825	TRUE	\$378.86	12-15-18-21-24- 26-29-32-33-34- 36	MCDC FFTT
10	\$5,000.00	FALS E	5	FALSE	501	0.0825	FALS E	\$4,600.63	-	MCDC FFTT
11	\$5,000.00	TRUE	0	TRUE	500	0.0825	TRUE	\$4,600.63	-	Extreme range test for yearsMember
12	\$5,000.01	TRUE	50	TRUE	501	0.0825	TRUE	\$4,330.01	-	Extreme range test for yearsMember
13	\$1,250.00	TRUE	6	FALSE	1	0.0825	TRUE	\$1,285.47	-	Extreme range test for safetyRating
14	\$1,999.99	TRUE	5	FALSE	999	0.0825	TRUE	\$1,948.49	-	Extreme range test for safetyRating
15	\$0.00	TRUE	6	TRUE	501	0.0825	TRUE	\$0.00	-	Extreme range test for premium
16	\$10,000.00	TRUE	5	TRUE	501	0.0825	TRUE	\$8,660.00	-	Extreme range test for premium

Code coverage achieved is: full boundary coverage, full statement coverage, full decision coverage and extreme range coverage.

The test cases support the description (logical expression).