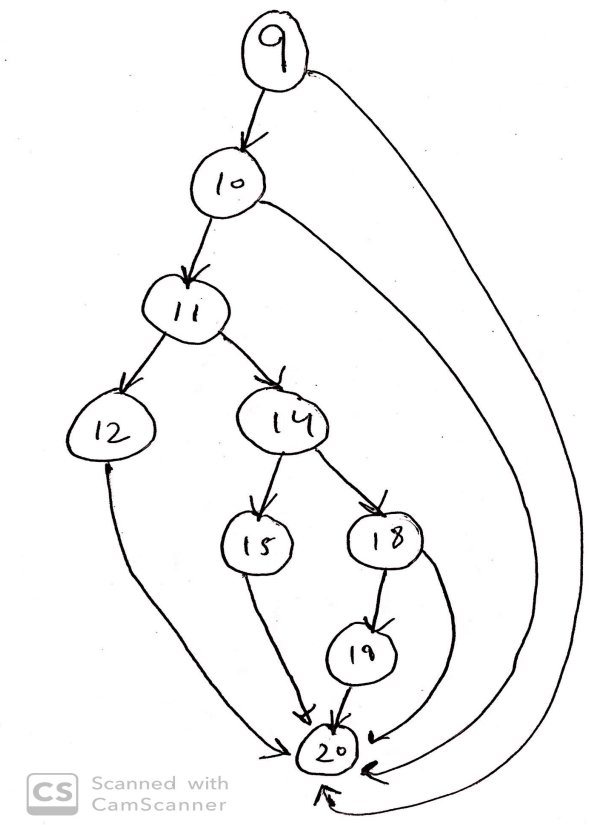
a)

1) Decision table: -

altfeet in feets						R6
Conditions	**Rule 1**	**Rule 2**	**Rule 3**	**Rule 4**	**Rule 5**	**F**
GeauUp = True	T	T	T	T	T	
0.0<=altfeet<=50.0	Y					
50.1<=altfeet<=100.0		Y				
100.10<=allfeet<=200.0			Y			
200.10<=allfeet<=400.0				Y		ALL Others
400.1<=allfeet<=50,000.0					Y	
Actions						
gndCollCaut	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
gndCollWarn	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
gndCollAlert	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE
emerGD	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE
Table implements first of rule						

2)



3) Cyclomatic complexity is 6.

4)

Test Case Number	Input		Exp Output				Basis Path
	gearUp	altfeet	gndCollCaut	gndCollWarn	gndCollAlert	emerGD	
1	TRUE	200.1	TRUE	FALSE	FALSE	FALSE	9-10-11-12-20
2	FALSE	200.1	FALSE	FALSE	FALSE	FALSE	9-20
3	TRUE	400.1	FALSE	FALSE	FALSE	FALSE	9-10-20
4	TRUE	100.1	FALSE	TRUE	FALSE	FALSE	9-10-11-14-15-20
5	TRUE	50.0	FALSE	FALSE	**TRUE**	TRUE	9-10-11-14-18-19-20
6	TRUE	50.1	FALSE	FALSE	**TRUE**	FALSE	9-10-11-14-18-20
7	TRUE	200.0	FALSE	TRUE	FALSE	FALSE	-
8	TRUE	100.0	FALSE	FALSE	TRUE	FALSE	-
9	TRUE	400.0	TRUE	FALSE	FALSE	FALSE	-
10	TRUE	50,000.0	FALSE	FALSE	FALSE	FALSE	extreme range (altfeet)
11	TRUE	0.0	FALSE	FALSE	TRUE	TRUE	extreme range (altfeet)

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

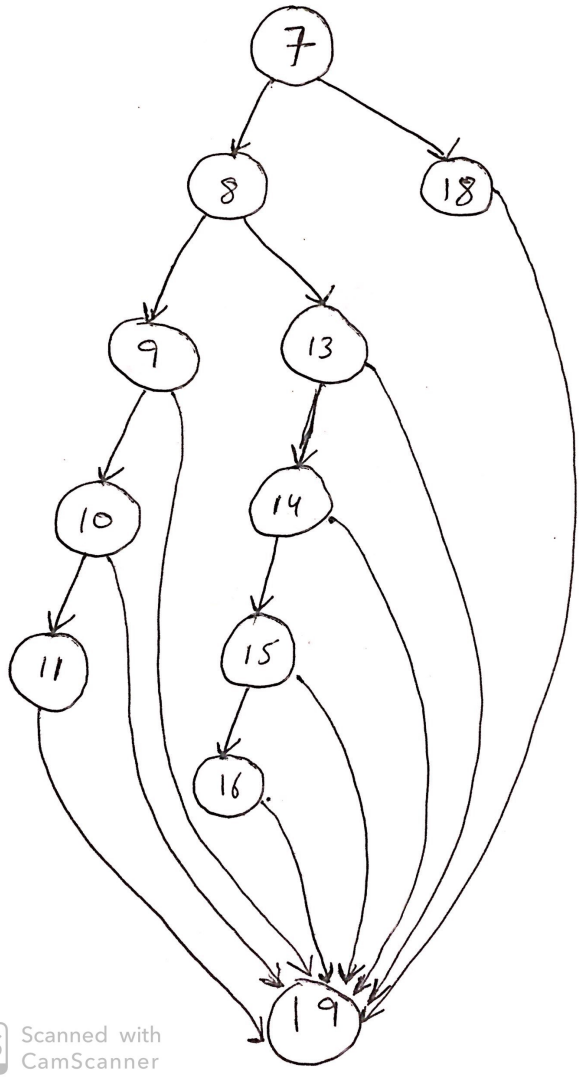
6) Yes, test cases support the description.

b)

1) Decision Table –

Altitude in feet								
Speed in mph								
Conditions	**R1**	**R2**	**R3**	**R4**	**R5**	**R6**	**R7**	**R8**
Landing = True	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**F**
0.0 <= altitude <= 2499.9				Y			Y	ALL Others
2500.0 <= altitude <= 5000.0	Y					Y		
5000.1 <= altitu	Y		Y		Y			
0.0 <= speed <= 100.0							Y	
100.1 <= speed <= 199.9		Y			Y			
200.0 <= speed	Y					Y		
500.0 <= speed <= 1000.0			Y	Y				
ACTIONS								
action	DEPLOY	releaseChute	NONE	NONE	none	none	none	descend

2)



3) Cyclomatic complexity is 8.

4)

Test Case Number	Inputs			Exp Output	Comments
	Landing	**altitude**	**speed**	**Return**	
1	TRUE	5000.1	200.0	deploy	7-8-9-10-11-19
2	FALSE	5000.1	200.0	descend	7-18-19
3	TRUE	2500.0	100.1	release	7-8-13-14-15-16-19
4	TRUE	5000.1	500.0	none	7-8-9-19
5	TRUE	2499.9	500.0	none	7-8-13-19
6	TRUE	5000.1	199.9	none	7-8-9-10-19
7	TRUE	2500.0	200.0	none	7-8-13-14-19
8	TRUE	2500.0	100.0	none	7-8-13-14-15-19
9	TRUE	5000.1	499.9	deploy	-
10	TRUE	5000.0	499.9	none	-
11	TRUE	5000.1	0.0	none	Extreme range speed
12	TRUE	5000.1	1000.0	none	Extreme range speed
13	TRUE	0.0	499.9	none	Extreme range altitude
14	TRUE	10000.0	499.9	deploy	Extreme range altitude

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

6) Yes, test case support the description.