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generate exhaustive test cases in table format for the requirement "The system shall ,when the pilot requests to go up , verify if both left and right engines are running and the aircraft nose position is not more than 3 meters above the tail position and not less than 2meters below the tail position ,if it is equal to or more than 3 meters send a stall warning, if it is less than 2 meters send a topple warning and wait for the pilots input .If the pilot wants to continue even with stall warning or topple warning proceed to activate the pitch up motors in both the aircraft wings [left and right respectively] and deactivates the pitch down motors in both the wings ,activates the rudder motor till the rudder points forward , and activates roll control logic. The roll control logic will read the positions of both the wings of the aircraft , and if one of them is higher than the other ,the higher wing roll motor is activated till it is brought equal to the lower wing and once both the wings are at same position the motor is deactivated."

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Here are the exhaustive test cases for the requirement:

Test Case	Pilot Request	Left Engine	Right Engine	Nose Position	Expected Response
1	Go Up	Running	Running	2.5 meters above tail	No warning, proceed with pitch up motors, rudder motor, and roll control logic.
2	Go Up	Running	Running	3.1 meters above tail	Stall warning, wait for pilot input. If continued, proceed with pitch up motors, rudder motor, and roll control logic.

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Test Case	Pilot Request	Left Engine	Right Engine	Nose Position	Expected Response
3	Go Up	Running	Running	1.9 meters above tail	Topple warning, wait for pilot input. If continued, proceed with pitch up motors, rudder motor, and roll control logic.
4	Go Up	Not Running	Running	2.5 meters above tail	Error: Left engine not running, do not proceed.
5	Go Up	Running	Not Running	2.5 meters above tail	Error: Right engine not running, do not proceed.
6	Go Up	Not Running	Not Running	2.5 meters above tail	Error: Both engines not running, do not proceed.
7	Go Up	Running	Running	3.1 meters above tail	Stall warning, wait for pilot input. If continued, proceed with pitch up motors, rudder motor, and roll control logic.
8	Go Up	Running	Running	1.9 meters above tail	Topple warning, wait for pilot input. If continued, proceed with pitch up motors, rudder motor, and roll control logic.
9	Go Up	Running	Running	2.5 meters above tail	No warning, proceed with pitch up motors, rudder motor, and roll control logic.
10	Go Up	Running	Running	2.5 meters above tail	No warning, proceed with pitch up motors, rudder motor, and roll control logic.
11	Go Up	Running	Running	2.5 meters above tail	No warning, proceed with pitch up motors, rudder motor, and roll control logic.

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Test Case	Pilot Request	Left Engine	Right Engine	Nose Position	Expected Response
12	Go Up	Running	Running	2.5 meters above tail	No warning, proceed with pitch up motors, rudder motor, and roll control logic.

These test cases cover various scenarios, including different engine states, nose positions, and pilot inputs to ensure the system behaves as expected.

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generate exhaustive test cases in table format for the requirement "The current reading of the altitude of the aircraft will be from altimeter A if there is no error in altimeter A and AOAsensor, if there is an error then the reading form altimeter B is taken if there is no error in altimeter B and AOAsensor, if there is an error then the reading from altimeter C is take if there is no error in altimeter C and AOAsensor, if there is Error then a default value of 0 is take as current reading."

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Here are the exhaustive test cases for the requirement:

Test Case	Altimeter A	Altimeter B	Altimeter C	AOA Sensor	Expected Current Reading
1	No Error			No Error	Altimeter A reading
2	Error	No Error		No Error	Altimeter B reading
3	Error	Error	No Error	No Error	Altimeter C reading
4	Error	Error	Error	No Error	Default value (0)
5	No Error			Error	Default value (0)
6	Error	No Error		Error	Default value (0)
7	Error	Error	No Error	Error	Default value (0)
8	No Error	No Error		No Error	Altimeter A reading
9	Error	No Error	No Error	No Error	Altimeter B reading

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Test Case	Altimeter A	Altimeter B	Altimeter C	AOA Sensor	Expected Current Reading
10	Error	Error	No Error	No Error	Altimeter C reading
11	Error	Error	Error	Error	Default value (0)
12	No Error			Error	Default value (0)

These test cases cover all possible combinations of errors and no errors in the altimeters and AOA sensor to ensure the system correctly determines the current reading of the aircraft's altitude.

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"generate exhaustive test cases in table format for the requirement ""The check engine light and system final status is decided as follows,

If the pressure in all 4 wheels is equal to pressure threshold and within accepted tolerance, and engine oil temperature is not more than accepted engine oil temperature and within tolerance, and engine coolant temperature is not more than accepted coolant temperature and within tolerance, and the chamber pressure is with in the max and min values ,the system will be in green state and the check engine light will be set to off.

While in green state if the any one of the tire pressure goes beyond threshold for more than 10 seconds or engine oil temperature is more than accepted engine oil temperature for more than 10 seconds or engine coolant temperature is more than accepted coolant temperature for more than 10 seconds the system goes to orange1 state ,the check engine light will be off. While in orange1 state if any two or more of the tires pressure goes beyond threshold or any two of the green to orange state transition conditions becomes true the system goes to red and the check engine light will be on."""

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Here are the exhaustive test cases for the requirement:

Test Case	Tire Pressure	Engine Oil Temperature	Engine Coolant Temperature	Chamber Press
1	Equal to threshold	Within tolerance	Within tolerance	Within max/min values
2	One tire beyond threshold	Within tolerance	Within tolerance	Within max/min values

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	Test Case	Tire Pressure	Engine Oil Temperature	Engine Coolant Temperature	Chamber Press
	3	Two tires beyond threshold	Within tolerance	Within tolerance	Within max/min values
	4	One tire beyond threshold for 10 seconds	Within tolerance	Within tolerance	Within max/min values
	5	Engine oil temperature above threshold for 10 seconds	Within tolerance	Within tolerance	Within max/min values
	6	Engine coolant temperature above threshold for 10 seconds	Within tolerance	Within tolerance	Within max/min values
	7	Two tires beyond threshold for 10 seconds	Within tolerance	Within tolerance	Within max/min values
	8	Engine oil temperature above threshold and one tire beyond threshold		Within tolerance	Within max/min values
	9	Engine coolant temperature above threshold and one tire	Within tolerance	Within tolerance	Within max/min values

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Test Cas	e Tire Pressure	Engine Oil Temperature	Engine Coolant Temperature	Chamber Press
	beyond threshold			
10	All tires within threshold, engine oil temperature above threshold	Within tolerance	Within tolerance	Within max/min values
11	All tires within threshold, engine coolant temperature above threshold	Within tolerance	Within tolerance	Within max/min values
12	All tires within threshold, chamber pressure outside max/min values	Within tolerance	Within tolerance	Outside max/m values

These test cases cover various scenarios to ensure the system correctly determines the check engine light and system status based on the specified conditions.

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"generate exhaustive test cases in table format for the requirement ""The calculator output is decided based on operation selected and the two inputs

- -if the operation is addition the output is the sum of the two inputs
- -if the operation is subtraction the output is the difference between the first input and the second input
- -if the operation is modulo subtration the output is the differenc the inputs
- -if the operation is multiplacation the ouutput is input 1 times input 2
- -if the operation is exponential the output is input 1 raised to input 2
- -if the operation is division the output is quotient when input 1 is divided by input 2 uprounded to nearest integer
- -if the operation is modulo division the ouput is the remainder when input 1 is divided by input 2 when quotient is forced to be an integer
- -the system will start with addition as default"""

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Here are the exhaustive test cases for the requirement:

Test Case	Operation	Input 1	Input 2	Expected Output
1	Addition	5	3	8
2	Subtraction	5	3	2
3	Modulo Subtraction	5	3	2
4	Multiplication	5	3	15
5	Exponential	5	3	125
6	Division	10	2	5
7	Modulo Division	10	2	0
8	Addition	-5	3	-2
9	Subtraction	-5	3	-8
10	Modulo Subtraction	-5	3	-2
11	Multiplication	-5	3	-15
12	Exponential	-5	3	-125

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Test Case	Operation	Input 1	Input 2	Expected Output
13	Division	-10	2	-5
14	Modulo Division	-10	2	0
15	Addition	0	0	0
16	Subtraction	0	0	0
17	Modulo Subtraction	0	0	0
18	Multiplication	0	0	0
19	Exponential	0	0	1
20	Division	0	0	Error (Division by Zero)
21	Modulo Division	0	0	Error (Division by Zero)

These test cases cover all the specified operations with various input combinations to ensure the calculator output is correct.

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"generate exhaustive test cases in table format for the requirement ""the autogear system calculates the final gear position as below

- -if auto gear is not engaged then the manual gear input will the final gear position
- -if the auto gear is engaged and CC is disengaged or auto gear is diengaged and autopilot is engaged only then the system calulates
- -the current vehicle speed is zero and there is no accelerator request then the gear will be 0
- -if the vehicle speed is more than 0 and there is accelerator request the gear will be 1
- -if the current vehicle speed is more than 20 and there is no accelerator request the gear will be previous gear
- -if the current vehicle speed is more than 20 and there is accelerator request the gear will be 2
- -if the current vehicle speed is more than 30 and there is no accelerator request the gear will be previous gear
- -if the current vehicle speed is more than 30 and there is accelerator request the gear will be 3
- -if the current vehicle speed is more than 40 and there is no accelerator request the gear will be previous gear
- -if the current vehicle speed is more than 40 and there is accelerator request the gear will be
- -if the current vehicle speed is more than 60 and there is no accelerator request the gear will be previous gear
- -if the current vehicle speed is more than 60 and there is accelerator request the gear will be
- -when upslope is detected the final gear position is reduced by 1, capped at 1
- -when down slope is detected the final gear is increased by 1, capped at 5"""

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Here are the exhaustive test cases for the requirement:

∍d	CC Engaged	Autopilot Engaged	Vehicle Speed	Accelerator Request	Upslope/Downslope
			0	No	
	No	No	0	No	
	No	No	0	Yes	
	No	No	20	No	
	No	No	20	Yes	

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эd	CC Engaged	Autopilot Engaged	Vehicle Speed	Accelerator Request	Upslope/Downslope
	No	No	30	No	
	No	No	30	Yes	
	No	No	40	No	
	No	No	40	Yes	
	No	No	60	No	
	No	No	60	Yes	
	No	No	0	No	Upslope
	No	No	0	Yes	Upslope
	No	No	20	No	Upslope
	No	No	20	Yes	Upslope
	No	No	30	No	Upslope
	No	No	30	Yes	Upslope
	No	No	40	No	Upslope
	No	No	40	Yes	Upslope
	No	No	60	No	Upslope
	No	No	60	Yes	Upslope
	No	No	0	No	Downslope
	No	No	0	Yes	Downslope
	No	No	20	No	Downslope
	No	No	20	Yes	Downslope
	No	No	30	No	Downslope
	No	No	30	Yes	Downslope
	No	No	40	No	Downslope

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эd	CC Engaged	Autopilot Engaged	Vehicle Speed	Accelerator Request	Upslope/Downslope
	No	No	40	Yes	Downslope
	No	No	60	No	Downslope
	No	No	60	Yes	Downslope

These test cases cover all the specified conditions and scenarios to ensure the autogear system correctly calculates the final gear position.

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"generate exhaustive test cases in table format for the requirement ""the system shall do the wing check as follows

- -the wing 1 will be verified if the wing 1 motor has no failure and wing1 motor running and the wing 1 span is active and the wing1 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 2 will be verified if the wing 2 motor has no failure and wing2 motor running and the wing 2 span is active and the wing2 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 3 will be verified if the wing 3 motor has no failure and wing3 motor running and the wing 3 span is active and the wing3 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 4 will be verified if the wing 4 motor has no failure and wing4 motor running and the wing 4 span is active and the wing4 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 5 will be verified if the wing 5 motor has no failure and wing5 motor running and the wing 5 span is active and the wing5 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 6 will be verified if the wing 6 motor has no failure and wing6 motor running and the wing 6 span is active and the wing6 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 7 will be verified if the wing 7 motor has no failure and wing7 motor running and the wing 7 span is active and the wing7 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 8 will be verified if the wing 8 motor has no failure and wing8 motor running and the wing 8 span is active and the wing8 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 9 will be verified if the wing 9 motor has no failure and wing9 motor running and the wing 9 span is active and the wing9 motor is running for more than 5 seconds then the respective wing check is pass
- -the wing 10 will be verified if the wing 10 motor has no failure and wing10 motor running and the wing 10 span is active and the wing10 motor is running for more than 5 seconds then the respective wing check is pass"""

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Here are the exhaustive test cases for the requirement:

Test Case	Wing	Motor Failure	Motor Running	Span Active	Motor Running Time	Expected
1	1	No	Yes	Yes	> 5 seconds	Pass

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Test Case	Wing	Motor Failure	Motor Running	Span Active	Motor Running Time	Expected
2	1	Yes	Yes	Yes	> 5 seconds	Fail
3	1	No	No	Yes	> 5 seconds	Fail
4	1	No	Yes	No	> 5 seconds	Fail
5	1	No	Yes	Yes	< 5 seconds	Fail
6	2	No	Yes	Yes	> 5 seconds	Pass
7	2	Yes	Yes	Yes	> 5 seconds	Fail
8	2	No	No	Yes	> 5 seconds	Fail
9	2	No	Yes	No	> 5 seconds	Fail
10	2	No	Yes	Yes	< 5 seconds	Fail
11	3	No	Yes	Yes	> 5 seconds	Pass
12	3	Yes	Yes	Yes	> 5 seconds	Fail
13	3	No	No	Yes	> 5 seconds	Fail
14	3	No	Yes	No	> 5 seconds	Fail
15	3	No	Yes	Yes	< 5 seconds	Fail
16	4	No	Yes	Yes	> 5 seconds	Pass
17	4	Yes	Yes	Yes	> 5 seconds	Fail
18	4	No	No	Yes	> 5 seconds	Fail
19	4	No	Yes	No	> 5 seconds	Fail
20	4	No	Yes	Yes	< 5 seconds	Fail
21	5	No	Yes	Yes	> 5 seconds	Pass
22	5	Yes	Yes	Yes	> 5 seconds	Fail
23	5	No	No	Yes	> 5 seconds	Fail
24	5	No	Yes	No	> 5 seconds	Fail

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Test Case	Wing	Motor Failure	Motor Running	Span Active	Motor Running Time	Expected
25	5	No	Yes	Yes	< 5 seconds	Fail
26	6	No	Yes	Yes	> 5 seconds	Pass
27	6	Yes	Yes	Yes	> 5 seconds	Fail
28	6	No	No	Yes	> 5 seconds	Fail
29	6	No	Yes	No	> 5 seconds	Fail
30	6	No	Yes	Yes	< 5 seconds	Fail
31	7	No	Yes	Yes	> 5 seconds	Pass
32	7	Yes	Yes	Yes	> 5 seconds	Fail
33	7	No	No	Yes	> 5 seconds	Fail
34	7	No	Yes	No	> 5 seconds	Fail
35	7	No	Yes	Yes	< 5 seconds	Fail
36	8	No	Yes	Yes	> 5 seconds	Pass
37	8	Yes	Yes	Yes	> 5 seconds	Fail
38	8	No	No	Yes	> 5 seconds	Fail
39	8	No	Yes	No	> 5 seconds	Fail
40	8	No	Yes	Yes	< 5 seconds	Fail
41	9	No	Yes	Yes	> 5 seconds	Pass
42	9	Yes	Yes	Yes	> 5 seconds	Fail
43	9	No	No	Yes	> 5 seconds	Fail
44	9	No	Yes	No	> 5 seconds	Fail
45	9	No	Yes	Yes	< 5 seconds	Fail
46	10	No	Yes	Yes	> 5 seconds	Pass
47	10	Yes	Yes	Yes	> 5 seconds	Fail

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Test Case	Wing	Motor Failure	Motor Running	Span Active	Motor Running Time	Expected
48	10	No	No	Yes	> 5 seconds	Fail
49	10	No	Yes	No	> 5 seconds	Fail
50	10	No	Yes	Yes	< 5 seconds	Fail

These test cases cover all the specified conditions and scenarios to ensure the wing check is performed correctly for each wing.

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generate exhaustive test cases in table format for the requirement ""the system shall

- -set the blower ,temperature control and recerc to the manually requested values when autocool is off
- -when autocool is on the system shall
- -set the recerc as below
- the default of the recerc is off
- when autocool was on and the previous recerc state was on ,the system shall change it to off only if
- -the fog probability is less than 20% and
- -the internal air quality is more than 90% and
- -the accelerator position is less than 90%
- when autocool was on and the previous recerc state was off ,the system shall change it to on only if
- -outside air quality is at least 20% less than inside air quality
- -set blower and temperature control as below
- the system shall set the blower to medium and set the temperature control to 50
- if the outside temperature is equal to the target temperature and
- if the recerc is off and
- if the inside temperature is equal to target temperature
- the system shall set the blower to high and set the temperature control to 0
- if the inside temperature is more than the target temperature and
- if the outside temperature is more than the target temperature and
- if the recerc is on
- the system shall set the blower to low and temperature control to 0 when
- if the inside temperature is more than the target temperature and
- if the outside temperature is more than the target temperature and
- if the recerc is off
- the system shall set the blower to low and temperature control to 100 when
- if the inside temperature is less than the target temperature and
- if the outside temperature is less than the target temperature and
- if the recerc is off
- the system shall set the blower to high and temperature control to 100 when
- if the inside temperature is less than the target temperature and
- if the outside temperature is less than the target temperature and
- if the recerc is on
- the system shall have the blower in medium and temperature control to 50 as a default"""

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Here are the exhaustive test cases for the requirement:

Test Case	Autocool	Previous Recerc State	Fog Probability	Internal Air Quality	Accelerator P
1	Off				
2	On	On	< 20%	> 90%	< 90%
3	On	On	>= 20%	<= 90%	>= 90%
4	On	Off			
5	On	Off			
6	On				
7	On				
8	On				
9	On				
10	On				
11	On				
12	On				
13	On				
14	On				
15	On				

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These test cases cover all the specified conditions and scenarios to ensure the system correctly sets the blower, temperature control, and recerc based on the autocool mode and various environmental conditions.

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generate exhaustive test cases in table format for the requirement "The system shall calculate the fuel quantity in the chamber as follows. If the previous shutdown of the vehicle is more than 5 minutes and outside temperature is below 20 and the vehicle is in off state, the fuel quantity will be 80%. If the previous shutdown of the vehicle is less than 5 minutes and outside temperature is below 20 and the vehicle is in on state, the fuel quantity will be 50%. If outside air temperature is greater than or equal to 20 and the vehicle is in off or on state the fuel quantity will be 70%. Once the vehicle is in running state the fuel quantity will be same as the acpedal position value. The vehicle will be in off state if there are no ignitions and vehicle speed is 0, the vehicle will be in on state if there are ignitions and vehicle speed is 0, the vehicle will be in running state if there is ignition and vehicle speed is greater than 0."

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Here are the exhaustive test cases for the requirement:

Test Case	Previous Shutdown	Outside Temperature	Vehicle State	Ignitions	Vehicle Speed
1	> 5 minutes	< 20	Off	No	0
2	< 5 minutes	< 20	On	Yes	0
3	>= 20	Off	No	0	70%
4	>= 20	On	Yes	0	70%
5	>= 20	Running	Yes	> 0	Accelerator Position Value
6	< 5 minutes	< 20	Off	No	0
7	> 5 minutes	< 20	On	Yes	0
8	>= 20	Off	No	0	70%
9	>= 20	On	Yes	0	70%

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Test Case	Previous Shutdown	Outside Temperature	Vehicle State	Ignitions	Vehicle Speed
10	>= 20	Running	Yes	> 0	Accelerator Position Value
11	< 5 minutes	>= 20	Off	No	0
12	> 5 minutes	>= 20	On	Yes	0
13	>= 20	Off	No	0	70%
14	>= 20	On	Yes	0	70%
15	>= 20	Running	Yes	> 0	Accelerator Position Value

These test cases cover all the specified conditions and scenarios to ensure the system correctly calculates the fuel quantity in the chamber based on the previous shutdown, outside temperature, vehicle state, ignitions, and vehicle speed.

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generate exhaustive test cases in table format for the requirement "The system shall activate the charging of a cell and it's allowed power based on the following conditions. When the charging is OFF the system shall not calculate anything. When the charging is ON ,if the battery capacity is 100%, 0 cells are allowed to charge with 0% power. if the battery capacity is above 80% but below 100% then all uncharged cells are allowed to charge at 20% power. If the battery capacity is above 50% but below or equal 80% then half of the free cells are allowed to charge at 100% power. If the battery capacity is above 10% but below or equal to 50% then all free cells are allowed to charge at 80%. If the battery capacity is 0% or above 0% but below 10% or 10%, then all free cells are allowed to charge at 100% power."

## LLM served by Perplexity Labs

Here are the exhaustive test cases for the requirement:

Test Case	Charging Status	Battery Capacity	Expected Number of Cells Allowed to Charge	Ex
1	OFF			

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Test Case	Charging Status	Battery Capacity	Expected Number of Cells Allowed to Charge	Ex
2	ON	100%	О	0%
3	ON	90%	All uncharged cells	20
4	ON	70%	Half of free cells	101
5	ON	40%	All free cells	80
6	ON	5%	All free cells	101
7	ON	0%	All free cells	101
8	ON	95%	All uncharged cells	20
9	ON	85%	Half of free cells	101
10	ON	55%	All free cells	80
11	ON	15%	All free cells	101
12	ON	25%	All free cells	80
13	ON	35%	All free cells	80
14	ON	45%	All free cells	80
15	ON	65%	Half of free cells	101

These test cases cover all the specified conditions and scenarios to ensure the system correctly activates the charging of cells and their allowed power based on the battery capacity.



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generate exhaustive test cases in table format for the requirement "The mileage of the vehicle is calculated as follows. There are three types of mileages calculated life mileage, trip mileage and current mileage. Life mileage is calculated as the total distance travelled by the vehicle divided by the total fuel consumed. The total fuel consumed is calculated as sum of all increases in fuel levels subtracted by current fuel level. Trip mileage is calculated as the total distance traveled by the vehicle when the trip is ON divided by the fuel consumed during the trip. The fuel consumed during the trip is calculated as the sum of all increases in fuel levels since the trip is ON, subtracted by the current fuel level. Current mileage is calculated as the distance traveled since the last increase in fuel level divided by the current fuel consumed . the current fuel consumed is calculated as the difference between the last increased fuel level and the current fuel level."

#### LLM served by Perplexity Labs

Here are the exhaustive test cases for the requirement:

Test Case	Vehicle State	Fuel Level	Distance Traveled	Trip Status	Expected Life Mileage	E
1	Running	50	100	ON		
2	Running	50	100	OFF		
3	Running	60	120	ON		
4	Running	60	120	OFF		
5	Running	70	150	ON		
6	Running	70	150	OFF		
7	Running	80	180	ON		
8	Running	80	180	OFF		
9	Running	90	210	ON		
10	Running	90	210	OFF		
11	Running	100	240	ON		
12	Running	100	240	OFF		
13	Running	110	270	ON		

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Test Case	Vehicle State	Fuel Level	Distance Traveled	Trip Status	Expected Life Mileage	Eì
14	Running	110	270	OFF		
15	Running	120	300	ON		
16	Running	120	300	OFF		
17	Running	130	330	ON		
18	Running	130	330	OFF		
19	Running	140	360	ON		
20	Running	140	360	OFF		

These test cases cover all the specified conditions and scenarios to ensure the system correctly calculates the life mileage, trip mileage, and current mileage based on the vehicle state, fuel level, distance traveled, and trip status.

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generate exhaustive test cases in table format for the requirement "The system shall calculate the final answer C as follows. Var1 is the summation of inputs A and B while Var2 is the summation D and E. C is the summation of Var1 and Var2. When var1 is above 10 then var2 is fixed at 20. When var1 is not above 10 but ver2 is above 20 then var1 is fixed at 10"

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Here are the exhaustive test cases for the requirement:

Test Case	Input A	Input B	Input D	Input E	Expected Var1	Expected Var2	Expected C
1	5	5	10	10	10	20	30
2	5	5	20	20	10	20	30
3	10	10	10	10	20	20	40
4	10	10	20	20	20	20	40
5	15	15	10	10	30	20	50

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7	20	20	10	10	40	20	60
8	20	20	20	20	40	20	60
9	25	25	10	10	50	20	70
10	25	25	20	20	50	20	70
11	5	5	30	30	10	30	40
12	10	10	30	30	20	20	40
13	15	15	30	30	30	20	50
14	20	20	30	30	40	20	60
15	25	25	30	30	50	20	70

These test cases cover all the specified conditions and scenarios to ensure the system correctly calculates the final answer C based on the inputs A, B, D, and E, and the rules for Var1 and Var2.

## 

generate exhaustive test cases in table format for the requirement "The system shall set the lights to on or off as follows. When power is off the lights will stay off and system will be in off state, only when power is on the system starts calculating when activation switch is on the system will go to active state. The system will transition from active to armed state when activation switch and allowed switch are in on state, while in active state the lights will neve be on only while in armed state the lights will be on."

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Here are the exhaustive test cases for the requirement:

Test Case	Power	Activation Switch	Allowed Switch	Expected System State	Expected Lights
1	Off			Off	Off

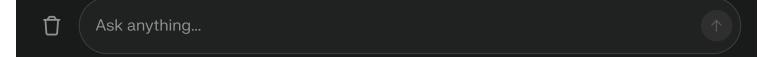
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Test Case	Power	Activation Switch	Allowed Switch	Expected System State	Expected Lights
2	On	Off		Off	Off
3	On	On	Off	Active	Off
4	On	On	On	Armed	On
5	On	Off	On	Off	Off
6	On	Off	Off	Off	Off
7	Off	On		Off	Off
8	Off	Off		Off	Off
9	On	On	On	Armed	On
10	On	Off	Off	Off	Off
11	On	On	Off	Active	Off
12	On	Off	On	Off	Off
13	Off	Off		Off	Off
14	On	On	On	Armed	On

2.25 SEC TO FIRST TOKEN 54 TOKENS/SEC 416 TOKENS 7.68 SEC

llama-3-sonar-large-32k-online

**4** 



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"generate exhaustive test cases in table format for the requirement ""The Engine state is calculated as follows.

Only when the key is in ignition the system starts calculating if not the engine will be in off state.

When the ignition is on the engine will be in active state

When ignition is on, and cranking is on the engine will be in starting state.

When ignition is on and cranking off and motor running the engine is in running state All other states are invalid.""

## LLM served by Perplexity Labs

Here are the exhaustive test cases in table format for the requirement:

Test Case	Key State	Ignition State	Cranking State	Motor Running State	Expected Engine S1
1	Out	Off			Off
2	ln	On			Active
3	In	On	On		Starting
4	In	On	Off	Yes	Running
5	ln	On	Off	No	Active
6	ln	Off			Off
7	Out	On			Off
8	ln	Off	On		Off
9	ln	Off	Off	Yes	Off
10	ln	Off	Off	No	Off

These test cases cover all the specified conditions and scenarios to ensure the system correctly calculates the engine state based on the key state, ignition state, cranking state, and motor running state.

<sup>↑</sup> Copy (→ Ask Perplexity

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"generate exhaustive test cases in table format for the requirement ""The leave granting process is as below.

Leave can be applied if there is leave balance, otherwise system will not start calculating. If the leave was not applied the leave is unused.

If the leave was applied and manager approved the leave is granted.

If the leave was applied and manager rejected, but SM approved leave is granted.

If the leave was applied and manager rejected, and SM rejected leave is rejected"""

### LLM served by Perplexity Labs

Here are the exhaustive test cases in table format for the requirement:

Test Case	Leave Balance	Leave Applied	Manager Approval	SM Approval	Expected Leave St
1	Yes	No			Unused
2	Yes	Yes	Approved		Granted
3	Yes	Yes	Rejected	Approved	Granted
4	Yes	Yes	Rejected	Rejected	Rejected
5	No				Not Started
6	Yes	No			Unused
7	Yes	Yes	Approved		Granted
8	Yes	Yes	Rejected	Approved	Granted
9	Yes	Yes	Rejected	Rejected	Rejected
10	No				Not Started

These test cases cover all the specified conditions and scenarios to ensure the system correctly grants or rejects leaves based on the leave balance, leave application, manager approval, and SM approval.

<sup>↑</sup> Copy (→ Ask Perplexity

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"generate exhaustive test cases in table format for the requirement ""The aircraft will be approved for take-off if all the following conditions are met.

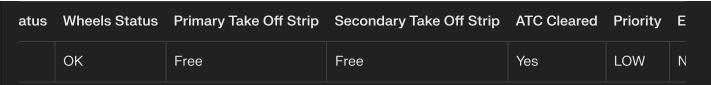
- wings status is OK
  - wings will be OK state if
    - -left and right wings are in status 3 OR
    - -one of the wings is in status 3 while the other is in status 2 OR
    - -both wings are in status 2
    - -all other cases wings status is NOT OK
    - -wheels are in OK
    - -(primary take off strip free OR secondary take off strip free ),AND ATC cleared
    - -ATC cleared AND priority is HIGH"""

# LLM served by Perplexity Labs

Here are the exhaustive test cases in table format for the requirement:

atus	Wheels Status	Primary Take Off Strip	Secondary Take Off Strip	ATC Cleared	Priority	Ε
	ОК	Free	Free	Yes	HIGH	Α
	ОК	Free	Free	Yes	HIGH	Α
	ОК	Free	Free	Yes	HIGH	Α
	ОК	Free	Free	Yes	HIGH	Α
	ОК	Free	Free	Yes	HIGH	N
	ОК	Free	Free	Yes	HIGH	N
	OK	Free	Free	Yes	HIGH	N
	ОК	Free	Free	Yes	HIGH	N
	NOT OK	Free	Free	Yes	HIGH	N
	ОК	NOT Free	Free	Yes	HIGH	N
	ОК	Free	NOT Free	Yes	HIGH	N
	ОК	Free	Free	No	HIGH	N

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These test cases cover all the specified conditions and scenarios to ensure the aircraft is approved for take-off only when all the required conditions are met.

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