

1.Equivalence Classes

Equivalence class	Day	Month	Year	Output
Day<1	0 or below	Any value	Any value	Invalid
Day > 31	32 or above	Any value	Any value	Invalid
Month < 1	Any value	0 or below	Any value	Invalid
Month > 12	Any value	13 or above	Any value	Invalid
Year < 1900	Any value	Any value	1899 or below	Invalid
Year > 2015	Any value	Any value	2016 or above	Invalid
Number of days exceeding 28 and year is not leap year	29-31	2	Not a leap year	Invalid
Day exceeding 30 in months with 30 days	31	4,6,9,11	Any value	Invalid
Number of days exceeding 29 and year is a leap year	30 or 31	2	Leap year	Invalid
Other inputs following the constraints	Eg:- 15	Eg:- 7	Eg:- 2012	Valid

Boundary Values

Parameter	Invalid	Valid	Valid	Invalid
Day	0	1	31	32
Month	0	1	12	13
Year	1899	1900	2015	2016

Test Cases

Index	Day	Month	year	output
1	0	10	2000	invalid
2	1	10	2000	30 - 9 - 2000
3	31	4	2012	invalid
4	30	2	Leap year	invalid
5	5	0	2000	invalid
6	5	1	2000	4 - 01 - 2000
7	1	4	2000	31- 03- 2000
8	5	13	2000	invalid
9	5	10	1900	4 - 10 - 1900
8	1	1	2000	31-12-1999
11	5	10	2015	4 - 10 - 2015
10	1	1	2013	31-12-2012
13	5	10	2000	Prev. date
14	1	1	2001	Prev. date

Equivalence Partitioning: Green

Boundary Value Analysis: Red

2.Equivalence Classes

Based on ID :-

- ID1: ID between 00000-99999 (both inclusive) i.e. $00000 \leq ID \leq 99999$ [valid]
- ID2: ID < 00000, qty any [invalid]
- ID3: ID greater than 99999 (99999 excluded) i.e. $ID > 99999$ [invalid]

Based on Quantity :-

- Quantity1: quantity between 0-99 (both inclusive) i.e. $0 \leq \text{quantity} \leq 99$ [valid]
- Quantity2: quantity less than 0 (0 excluded) i.e. $\text{quantity} < 0$ [invalid]
- Quantity3: quantity greater than 99 (99 excluded) i.e. $\text{quantity} > 99$ [invalid]

Based on Total :-

- Cart1: Cart total between 0-999.99 (both inclusive) i.e. $0 \leq \text{cart total} \leq 999.99$ [valid]
- Cart2: Cart total greater than 999.99 (999.99 excluded) i.e. $\text{cart total} > 999.99$ [invalid]
- Cart3: Cart total less than 0 (0 excluded) i.e. $\text{cart total} < 0$ [invalid]

Boundary Values

Parameter	Invalid	Valid	Valid	Invalid
ID	-1	0	99999	100000
Quantity	-1	0	99	100
Cart Total	-0.01	0	999.99	1000.00

Test Cases

Test case number	ID	Quantity	Cart Total	output
1	-1	Quantity1	Cart1	Invalid
2	0	Quantity1	Cart1	Valid
3	99999	Quantity1	Cart1	Valid
4	100000	Quantity1	Cart1	Invalid
5	ID1	0	Cart1	remove item from cart(if it was purchased earlier)
6	ID1	1	Cart1	Valid
7	ID1	99	Cart1	Valid
8	ID1	100	Cart1	Invalid
9	ID1	Quantity1	-1	Invalid
10	ID1	Quantity1	0	Valid
11	ID1	Quantity1	999.99	Valid
12	ID1	Quantity1	1000.00	Invalid
13	ID1	Quantity1	Cart1	Valid
14	ID1	Quantity1	Cart2	Invalid
15	ID1	Quantity1	Cart3	Invalid
16	ID1	Quantity2	Cart1	Invalid
17	ID1	Quantity2	Cart2	Invalid
18	ID1	Quantity2	Cart3	Invalid
19	ID1	Quantity3	Cart1	Invalid

20	ID1	Quantity3	Cart2	Invalid
21	ID1	Quantity3	Cart3	Invalid
22.	ID2	Quantity1	Cart1	Invalid
23	ID2	Quantity1	Cart2	Invalid
24.	ID2	Quantity1	Cart3	Invalid
25.	ID2	Quantity2	Cart1	Invalid
26.	ID2	Quantity2	Cart2	Invalid
27.	ID2	Quantity2	Cart3	Invalid
28.	ID2	Quantity3	Cart1	Invalid
29.	ID2	Quantity3	Cart2	Invalid
30.	ID2	Quantity3	Cart3	Invalid
31.	ID3	Quantity1	Cart1	Invalid
32.	ID3	Quantity1	Cart2	Invalid
33	ID3	Quantity1	Cart3	Invalid
34	ID3	Quantity2	Cart1	Invalid
35	ID3	Quantity2	Cart2	Invalid
36	ID3	Quantity2	Cart3	Invalid
37	ID3	Quantity3	Cart1	Invalid
38	ID3	Quantity3	Cart2	Invalid
39	ID3	Quantity3	Cart3	Invalid

Equivalence Partitioning: Green

Boundary Value Analysis: Red

