

## Group 19

### Lab 9 10/4/2021

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**Q1.** Equivalent class test cases:-

Class No	Eq Class	Day	Month	Year	Output
1	Day<1	0	any	any	Invalid
2	Day>31	32	any	any	Invalid
3	Day>=30	30	2	any	Invalid
4	Day=31	31	2,4,6,9,11	any	Invalid
5	Month<1	any	0	any	Invalid
6	Month>12	any	13	any	Invalid
7	Year<1900	any	any	1899	Invalid
8	Year>2015	any	any	2016	Invalid
9	Non-leap year	29	2	Any non-leap years between 1900 & 2015	Invalid
10	Leap year	29	2	2012 or Leap years between 1900 & 2015	Valid, {28-2-2012}
11	1<=Day<=28	any	1<=month<=12	1900<=year<=2015	Valid Previous date
12					
13					

For boundary value test cases:-

Class no	Eq class	day	month	year	output
1	Day=0	0	any	any	Invalid
2	Day=1	1	1<=month<=12	1900<=year<=2015	Valid Previous date

3	Day=30	30	Any month except 2nd	1900<=year<=2015	Valid Previous date
4	Day=31	31	1,3,5,7,8,10,12	1900<=year<=2015	Valid Previous date
5	Day=32	32	any	any	Invalid
6	Month=0	any	0	1900<=year<=2015	Invalid
7	Month=1	1<=day<=31	1	1900<=year<=2015	Valid Previous date
8	Month=12	1<=day<=31	12	1900<=year<=2015	Valid Previous date
9	Month=13	any	13	1900<=year<=2015	invalid
10	Year=1899	any	any	1899	invalid
11	Year=1900	1<=day<=31	1<=month<=12	1900	Valid Previous date
12	Year=2015	1<=day<=31	1<=month<=12	2015	Valid Previous date
13	Year=2016	any	any	2016	Invalid

For determining the previous date,

- For 11th class no , Decrement the date by 1.
- If the entered date is 31 i.e. last date, reset the day to 1 and decrement the month by 1.
- If the entered date is 1 January i.e. 1/1/yyyy, decrement the year by 1.
- When the date, month and year does not belong to equivalence class 10, 11, 12, and 13 respectively, the entered date is invalid date.

## Q2. Equivalent class :

1.  $0 \leq \text{Id} \leq 99999$
2.  $0 \leq \text{quantity} \leq 99$
3.  $0 \leq \text{total amount} \leq 999.99$
4. quantity > 99, ID any
5. quantity <= 0, ID any
6. Total amount > 999.99, id any, quantity any

7. Total amount<0, id any, quantity any
8. id<0, quantity any
9. id>99999, quantity any

Class no.	Test Case	Expected output
1.	Id = 99999, quantity=99	Cart total
2.	Id = 0, quantity = 1	Cart total
3.	Id=-1, quantity = any	Invalid input
4.	id=100000, quantity = any	Invalid input
5.	Id = any, Quantity = -1	Invalid input
6.	Id = any, Quantity = 100	Invalid input
7.	Id = any, Quantity = 0 (if item was purchased previously)	Remove from cart
8.	$\sum \text{Quantity}(i) * \text{item price}(i) > 999.99$	Card limit exceeded
9.	$\sum \text{Quantity}(i) * \text{item price}(i) < 999.99$	Order placed