QA + Analyst. Tasks

1) Client needs:
   2 digit calculator for "add" operation.
   Please prepare:
   - requirements
   - estimation for testing
   - prepare test cases

2) Please write down test cases for such ticket description:
   The Next Increase Date field isn't adjusted when updating Contract Commencement Date field.
   Expected behavior: The Next Increase Date field is adjusted automatically after an update in Contract Commencement Date filed is performed and saved.

3) Write down test cases for next ticket:
   Password complexity
   1. Complexity: Minimum eight characters made up of at least one upper-case, one digit and one special character.
   2. Force users (whether internal or external such as borrower) to change their password once they log in the first time.

1. Calculator Requirements

1. User can start calculator using terminal Ctr+Alt+T, and entering gnome-calculator
2. User can input only digits
3. User can input only two digits
4. User cannot input decimals
5. When calc starts it shows "0"
6. "0" is replaced with first entered digit
7. Calculator has "+" button, it performs the same as "+" keyboard button
8. Calculator has "=" button, it performs the same as "Enter" keyboard button
9. Calculator has "-" button, it performs the same as "-" keyboard button
10. Calculator can have "-" in output, but only with one digit, like "-7"
11. User can add positive numbers in range of 0 – 99
12. User can add negative numbers in range of -1 – 9
13. When "-" button is clicked minus is not shown in input
14. If output value is less than – 9, error shows "output value is greater than two digits"
15. "+" digit click "=" returns same digit
16. digit "+" click "=" returns same digit
17. User can input from keyboard any combination of 0,1,2,3,4,5,6,7,8,9
18. User can input from keyboard: "+", "Enter", "-"
19. User cannot enter "," and "." in the input field
20. User cannot input any symbols or character
21. User cannot input space
22. User can add only digits that doesn't exceed 99 in sum, like 50 + 49
23. If output value is greater than 99, error is shown "Er"
24. User can clear all input field with a button "C"
25. User can clear numbers by one using Backspace button

Estimation for testing

Range of our calculator is 99 to -99. So the number of only positive available tests even without decimals will be 9801. Using equivalence partitioning and boundary value technique we can greatly decrease number of positive tests for add function. In average, working with requirements and developing test cases, testing can be covered within two hours.

TestCase #1 Verify add function for two digit calculator

Num	Steps	Expected result	Pass/Fail
1	Start calc	Calc started. 0 shows	
2	Input digit 18	18 shows	
3	click "+" button	18 shows	
4	Input digit 27	27 shows	
5	Click "=" button	35 shows	
6	Click "C" button	0 shows	
7	Input digit 01	1 shows	
8	click "+" button	1 shows	
9	Input 099	99 shows	
10	Click Enter button	Er	
11	Input "–" and digit 4	4 shows	
12	click "+" button	4 shows	
13	Input "–" and digit 5	5 shows	
14	Click Enter	-9 shows	
15	Click Backspace	0 shows	
16	Input "–" and digit 1	1 shows	
17	click "+" button	1 shows	
18	Input "–" and digit 9	9 shows	
19	Click Enter button	Er	
20	Click "C" button	0 shows	
21	Input space " "	0 shows	
22	Input ~!@#$%^&*()__+}{":><?-*/	0 shows	
23	Input 0.1	0 shows	
24	Input "+" 6 and click "="	6 shows	
25	Input 6 "+" and click "="	6 shows	
26	Input 58 and click Backspace once	5 shows	

2 Please write down test cases for such ticket description:
The Next Increase Date field isn't adjusted when updating Contract Commencement Date field.

Expected behavior: The Next Increase Date field is adjusted automatically after an update in Contract Commencement Date filed is performed and saved.

Test case

Num	Steps	Expected result	Pass/Fail
1	Update Contract Commencement Date field to new future date as in DB format dd/mm/yyyy and value in dd/mm/yyyy 02/28/2018, click save	Next Increase Date field is adjusted automatically forward according to given increment	
2	Update Contract Commencement Date field to new future date as in DB fromat dd/mm/yyyy and value in mm/dd/yyyy 02/01/2018, click save	Next Increase Date field is adjusted automatically forward according to given increment	
3	Update Contract Commencement Date field to new future date as dd/mm/yyyy 01/03/2018, click save	Next Increase Date field is adjusted automatically forward according to given increment	
4	Update Contract Commencement Date field to new future date as in DB format dd/mm/yyyy and value in dd/mm/yyyy 02/28/2017, click save	Error	
5	Update Contract Commencement Date field to new future date as in DB format dd/mm/yy and value in dd/mm/yy 05/01/18, click save	Next Increase Date field is adjusted automatically forward according to given increment	
6	Update Contract Commencement Date field to new future date as in DB format dd/mm/yy and value in yy/mm/dd 18/05/01, click save	Error	
7	Update Contract Commencement Date field to new future date as in DB format dd/mm/yyyy and value in dd/mm/yyyy 02/29/2018, click save	Error	
8	Update Contract Commencement Date field to new future date as in DB format dd/mm/yyyy and value in dd/mm/yyyy 31/08/2018 in different time zone, click save	Next Increase Date field is adjusted automatically forward according to given increment	

Write down test cases for next ticket:

Password   complexity
1. Complexity: Minimum eight characters made up of at least one upper-case, one digit   and   one   special   character.
2. Force users (whether internal or external such as borrower) to change their password once they log in the first time.

	Test case 1 External User		
Num	Steps	Expected result	Pass/ Fail
1	Open https://mybankAccount.com and on the top right corner click on "Personal Cabinet"	Dialog window pops up with "Current Pass" and email input fields	
2	Enter current pass and email and click Sign Up	User successfully signed up with warning dialog window pops up "Please enter new password" with new password and repeat password input fields	
3	Input 8 characters	Warning message shows up "Pass must contain at least one upper-case, one digit and one special character"	
4	Input 8 digits	Warning message shows up "Pass must contain at least one character and one special character"	
5	Input 8 special characters	Warning message shows up "Pass must contain at least one character, one upper-case character and one digit"	
6	Input 8 spaces	Error message "Pass cannot contain spaces"	
7	Input <script>alert('asd');</script>	Error message "Pass cannot contain script"	
8	Input 7 characters with one upper-case, one digit and one special character	Warning "Pass must contain at least 8 characters"	
9	Input 8 characters with one upper-case, one digit and one special character in pass field Input 8 characters with one upper-case, one digit and one special character in repeat pass field and click Log in button	User successfully entered new pass and logged in to user Home Page	
10	Click log out	User successfully logged out to Login Page	
11	Using a new valid password by reversing it try to log in again.	User is not logged in with error message "Password is Reversed"	

	Test Case 2 External User		Pass/Fail
	Prerequisites: Create a new current password for a new test user		
1	Open https://mybankAccount.com and on the top right corner click on "Personal Cabinet"	Dialog window pops up with "Current Pass" and email input fields	
2	Enter current pass and email click Sign Up	User successfully signed up with warning dialog window pops up "Please enter new password" with new password and repeat password input fields	
3	Input Max available numbers of characters with several upper-cases, several digits and several special characters in pass field Repeat pass and click Save	User successfully entered new pass and logged in to user Home Page (check that pass is encrypted in POST request)	
	Test case 3 Internal User		
1	Open https://mybankAccountLoginPage.com and login using valid password and valid email	User successfully entered new pass and logged in to user Home Page	
2	Click log out	User successfully logged out to Login Page	
3	Enter invalid email and valid password	Error message "Incorrect Email"	
4	Enter valid email and invalid password	Error message "Incorrect Password"	
5	Enter invalid email and invalid password	Error message "Incorrect Password and Email"	
6	Enter valid email of current user and valid password of other user	Error message "Incorrect Password"	
7	Enter valid password and copy pass and paste it in txt file	Nothing should be copied	
8	Enter empty pass and empty email	Error message "Incorrect Password"	
9	Input 8 characters with one upper-case, one digit, one special character and one Arabic letter in pass field	Error message "Incorrect Password"	