SDET - Internship tasks - Solutions

1. Test function and create input/output data sets, describe which cases this data set will test:

Function description:
Find the length of the longest substring without repeating characters in the given string `s`.

Table of data sets:

No.	Input	Output			Remarks
-	-	Final unique substrings:	count:	length:	-
1.		No input entered, exiting.			Without input – empty submit
2.	a	[a]	1	1	
3.	ab	[ab]	1	2	
4.	abc	[abc]	1	3	
5.	abca	[abc, bca]	2	3	
6.	abcabcbb	[abc, bca, cab]	3	3	Example from task
7.	1234567890	[1234567890]	1	10	All different digits
8.	1234qwer1234	[1234qwer, 234qwer1, 34qwer12, 4qwer123, qwer1234]	5	8	Digits and letters
9.	123qweasdzxc456rtyfghvbn	[123qweasdzxc456rtyfghvbn]	1	24	Many digits and letters
10.	!@#$%^&*()_+[]{};':",.<>/?	[!@#$%^&*()_+[]{};':",.<>/?]	1	26	Signs, characters
11.	1 6 j 8 ee j 7 5	[1 6, 8 e, j 7, 7 5]	4	3	Using "space" key
12.	bf2938f239.[..]e[.[5.g?=--,3-40,f,34,f- /[/-43lv9f340 9fk3f[,34f349 fk3c9m				Checking maximal input, compiler (https://www.programiz.com/javascript/online-compiler/) haven't printed all of output.
13.	bf2938f239.[..]e[.[5.g?=--,3-40,f,34,f- /[/-43lv9f340 9fk3f[,34f349				String shorter than above, result the same.

Above data set can test various cases (user input):

1. Empty input.
2. Only letters input.
3. Only digits.
4. Mix of letters and digits.
5. Different signs and characters.
6. Using "space" key while typing.
7. Too big input.

There might be some variations of above test cases, but mostly they will be connected with those mentioned above.

2. **UI testing** (JS/TS)

Create test-cases for successful and unsuccessful login, and any additional test-cases you might think it would be good to add.

http://uitestingplayground.com/sampleapp

Test scenario	Test Case	Test Data	Expected Result	Actual result
Login functionality	Empty username and empty password.	Username: Password:	Invalid username/password	Invalid username/password
	Empty username and valid password	Username: Password: pwd	Invalid username/password	Invalid username/password
	Valid username and unvalid password.	Username: 1 Password:	Invalid username/password	Invalid username/password
	Valid username and valid password.	Username: 1 Password: pwd	Welcome, 1!	Welcome, 1!
	Reloading page in browser	Username: 1 Password: pwd	User still looged in.	User logged out.
	Typing to omany characters in „login box"	Username: 1111111111 1111111111 1111111111 1111111111 Password: pwd	Response: too many characters typed in.	Welcome, 11111111111111111111 11111111111111111111!
	Checking if password is masked	Username: 1 Password: 11111111	Password is masked	Password was masked
	Checking if password can be copied	Username: 1 Password: 11111111	Password should not be allowed to be copied.	I could copy password.
	Checking	Username:	Welcome, 1!	User logged in or other

	if user is still logged in after cliking „forward" and „backward" in browser	1 Password: pwd		response of being logged.
	Clicking: „Log out"	Username: 1 Password: pwd	User logged out.	User logged out.