CSCI 12063 - Web Programming -Work Sheet- 01

1. Create a page that shows a message "I'm an Undergraduate Student!".
2. Use the following text and display the text exactly as shown in the below output.
   Text to use:

   > JavaScript is a versatile programming language primarily employed in client-side web development. Its lightweight nature makes it ideal for implementing validations, which are processed on the client-side. JavaScript is currently in high demand in the market for web development due to its capability for dynamic code execution.

   Output:

   JavaScript is a versatile programming language primarily employed inclient-side web development. Its lightweight nature makes it ideal for implementing validations, which are processed on the client-side. JavaScript is currently in high demand in the market for web development due to its capability for dynamic code execution.

3. What is the output of the script?

```
1  let name = "Ilya";
2
3  alert( `hello ${1}` ); // ?
4
5  alert( `hello ${"name"}` ); // ?
6
7  alert( `hello ${name}` ); // ?
```

4. Design a web page where individuals can enter their name, which will then be presented as output on the screen.

5. Here's a code that asks the user for two numbers and shows their sum. It works incorrectly. The output in the example below is 12 (for default prompt values).Why? Fix it. The result should be 3.

```
1  let a = prompt("First number?", 1);
2  let b = prompt("Second number?", 2);
3
4  alert(a + b); // 12
```

6. Using the if..else construct, write the code which asks:

'What is the "staple food" of Sri Lanka?'

If the visitor enters "Rice", then output "Right!", otherwise – output: "You don't know? Rice!"

7. Using if..else, write the code which gets a number via prompt and then shows in alert:

5, if the value is greater than zero,
-5, if less than zero,
0, if equals zero.
Assumption: input is always a number.

8. Rewrite this if using the conditional operator '?':

```js
let result;
const a = 2; // For example
const b = 1; // For example

if (a + b < 4) {
  result = 'Below';
} else {
  result = 'Over';
}

alert(result);
```

9. Rewrite if..else using multiple ternary operators '?'.For readability, it's recommended to split the code into multiple lines.

```js
let login = prompt("Please enter your login:");

let message;

if (login == 'Employee') {
  message = 'Hello';
} else if (login == 'Director') {
  message = 'Greetings';
} else if (login == '') {
  message = 'No login';
} else {
  message = '';
}

alert(message);
```

10. Write the code which asks for a login with prompt.

If the visitor enters "Admin", then prompt for a password, if the input is an empty line or Esc – show "Login Canceled", if it's another string – then show "I can't recognize you".

The password is checked as follows:

If it equals "Master", then show "Welcome to the site",

Another string – show "Incorrect password",

For an empty string or cancelled input, show "Canceled"

Please use nested if blocks. Mind the overall readability of the code.

Hint: passing an empty input to a prompt returns an empty string ''. Pressing ESC during a prompt return null.

11. Write a JavaScript program that utilizes a 'for loop' to display all even numbers in the range from 2 to 10.

12. Modify the given code to achieve the same output using a while loop instead of a for loop.

```
1  for (let i = 0; i < 3; i++) {
2    alert( `number ${i}!` );
3  }
```

13. Write a loop which prompts for a number greater than 50. If the visitor enters another number – ask them to input again.

The loop must ask for a number until either the visitor enters a number greater than 50 or cancels the input/enters an empty line.

Here we can assume that the visitor only inputs numbers. There's no need to implement a special handling for a non-numeric input in this task.

14. Rewrite the code below using a single switch statement:

```
1  let a = +prompt('a?', '');
2
3  if (a == 0) {
4    alert( 0 );
5  }
6  if (a == 1) {
7    alert( 1 );
8  }
9
10 if (a == 2 || a == 3) {
11   alert( '2,3' );
12 }
```

15. Write the code using if..else which would correspond to the following switch:

```
1  switch (browser) {
2    case 'Edge':
3      alert( "You've got the Edge!" );
4      break;
5
6    case 'Chrome':
7    case 'Firefox':
8    case 'Safari':
9    case 'Opera':
10     alert( 'Okay we support these browsers too' );
11     break;
12
13   default:
14     alert( 'We hope that this page looks ok!' );
15 }
```