NAZARBAYEV UNIVERSITY

SCHOOL OF ENGINEERING AND DIGITAL SCIENCES

Web Programming and Problem Solving

JavaScript Loops (lab)

Date: 28.10.2022

Instructor: Zhandos Yessenbayev

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Task

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Goal:

- In this **Lab** you will build practical skills to use JavaScript loops and functions to solve problems.

- **Deadlines:**
  - **Soft** deadline: Tuesday, 01.11.2022, until 23:59
  - **Hard** deadline: Wednesday, 02.11.2022, until 23:59

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Tasks

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In this task you need to **reimplement** your program that you did in Lab 8 with some modifications as follows:

1. you need to include the scores of all the labs for the computations;
2. you need to calculate the sums of the scores for each lab using loops (for or while loops);
3. you need to use functions in order to reuse your code;
4. you need to have the main function that takes your **labs** as arguments and returns the **results** object (as in lab 8).

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Data collection

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Task 1 (**5 points**).

In this task you need to work with your scores (Lab1-Lab9, and Quiz1) which are in the Course Dashboard (via link): https://docs.google.com/spreadsheets/d/1xqyqpQ10Wpug1tY8noiqhdiZsrKu15gMOl3nuUHUFq8/edit?usp=sharing

- Create one array per each Lab, where the elements of the array are the individual scores for each criteria (**5 points**):
  - let lab1 = [5, 5, 0, …];

No	GitHub account	Section	Text Editor (5)	Hello, World! (5)	BrowserSync (5)	Git (5)	GitHub Account (5)	First Commit (10)	Publish website (10)
1	AdilAbdilov	1L					5		
2	abduali10s	1L					5		
3	Nepolionn	1L	5	5		5	5	10	10
4	TimurAmrenov	1L	5	5		5	5	10	10
5	AselArgynbek	1L	5	5		5	5	10	10
6	aidanabaltabekova	1L	5	5		5	5	10	10

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Using loops

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Task 2 (**10 points**).

To calculate the sums, you **must** use for or while loops. For instance, you can use and modify the code below.

```
let lab1 = [5,5,0,5,5,10,10];
let sum1 = 0;
for (let i = 0; i < lab1.length; i++) {
  sum1 += lab1[i];
}
```

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Using functions

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Task 3 (**10 points**).

Since you have several sums, the computation of the sums **must** be implemented as a **function** so that it takes the **array of lab scores** as an argument and returns the **computed sum** as follows:

```
function get_sum(lab) {
    // body of the function
    return sum;
}
```

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Main function

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Task 4 (**10 points**).

In this task, you need to have the main function that takes your **labs** as arguments and returns the **results** object (as in lab 8).

And don't forget to print the results object to the console!!!

```
function main(lab1, lab2, lab3, …) {
    // body of the function
    return obj;
}
```

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Submission

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Task 5 (**5 points**).

To submit your work, follow these instructions:

1. Create a new repository on Github, named lab10.
2. Clone this repository to your local machine and work inside it.
3. Create a new HTML file, called index.html, which has only one **<h1>** tag with “Hello, World!” message.
4. Create a new JavaScript file, called main.js, which **must** contain your program (assignment) described above.
5. Link this main.js file to your index.html file (see the lecture notes).
6. The output of your program **must** be visible in the Console tab of the browser’s Developer Tools.
7. After you finish your work, submit it to the Github.

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Grading

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Task	Points
Data collection	5
Using loops	10
Using functions	10
Main function	10
Submission	5
TOTAL	**40**