TEST JS

Task 1.(1 point) create a simple function — chooseName() — that prints a random name from the provided array (names) to the provided paragraph (para).

Task 2.(1 point) create a function that draws a rectangle on the provided <canvas> (reference variable canvas, context available in ctx), based on the five provided input variables:

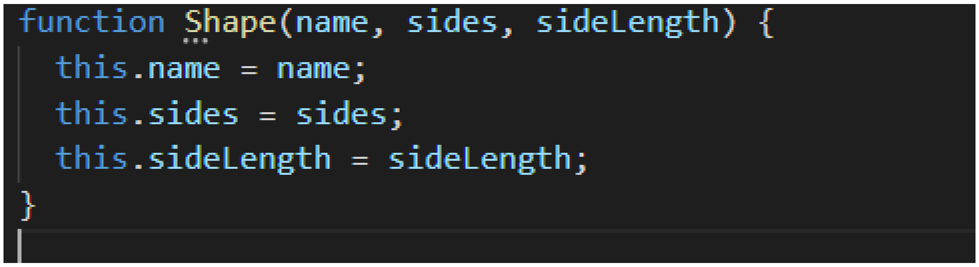
- x — the x coordinate of the rectangle.
- y — the y coordinate of the rectangle.
- width — the width of the rectangle.
- height — the height of the rectangle.
- color — the color of the rectangle.

Task 3.(3 point) with task 1, Please improvements with the following 3 requirements:

1. Refactor the code that generates the random number into a separate function called random(), which takes as parameters two generic bounds that the random number should be between, and returns the result.
2. Update the chooseName() function so that it makes use of the random number function, takes the array to choose from as a parameter (making it more flexible), and returns the result.
3. Print the returned result into the paragraph (para)'s textContent.

Task 4.(3 point) With func Shape(bellow), Make the following requests:

- Add a new method to the Shape class's prototype, calcPerimeter(), which calculates its perimeter (the length of the shape's outer edge) and logs the result to the console.
- Create a new instance of the Shape class called square. Give it a name of square and a sideLength of 5.
- Call your calcPerimeter() method on the instance, to see whether it logs the calculation result to the browser DevTools' console as expected.
- Create a new instance of Shape called triangle, with a name of triangle and a sideLength of 3.
- Call triangle.calcPerimeter() to check that it works OK.



```
function Shape(name, sides, sideLength) {
  this.name = name;
  this.sides = sides;
  this.sideLength = sideLength;
}
```

Task 5:(2point) Create a textarea named NoiDung, a Textbox named: SoKyTu. With the following requirements: When the user types keys into the textarea, the number of characters (String length) contained in that textarea will be displayed in the textbox. If the number of characters in the textarea typed exceeds 200 characters, the message: "You have typed more than the allowed characters!".