1 – Código:

```html
<!DOCTYPE html>

<!-- Fig. 7.7: average.html -->
<!-- Counter-controlled repetition to calculate a class average. -->
<html>

<head>
    <meta charset="utf-8">
    <title>Class Average Program</title>
    <script>
        var total; // sum of grades
        var gradeCounter; // number of grades entered
        var grade; // grade typed by user (as a string)
        var gradeValue; // grade value (converted to integer)
        var average; // average of all grades

        // initialization phase
        total = 0; // clear total
        // prepare to loop
        gradeCounter = 1;
        // processing phase
        while (gradeCounter <= 10) // loop 10 times
        {

            // prompt for input and read grade from user
            grade = window.prompt("Enter integer grade:", "0");

            // convert grade from a string to an integer
            gradeValue = parseInt(grade);

            // add gradeValue to total
            total = total + gradeValue;

            // add 1 to gradeCounter
            while (gradeCounter <= 10)
        } // end while

        // termination phase
        average = total / 10; // calculate the average

        // display average of exam grades
        document.writeln(
            "<h1>Class average is " + average + "</h1>");
    </script>
```
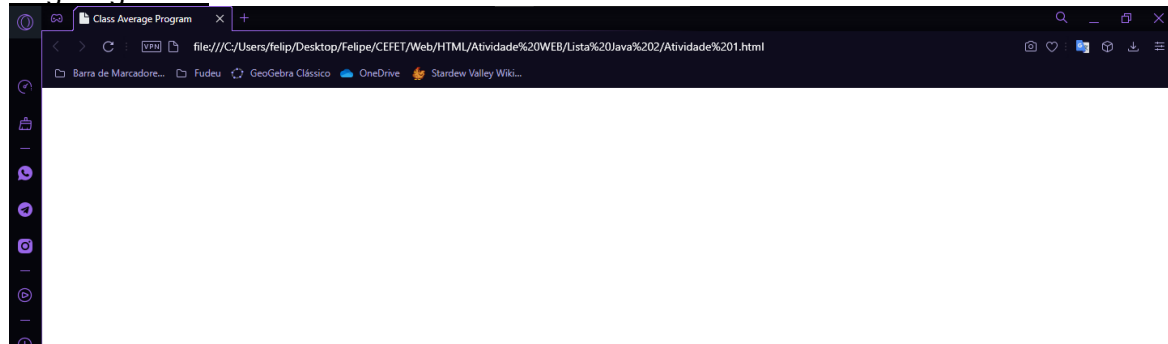
```
</head>

<body></body>

</html>
```

Página gerada:

2 – Código:

```html
<!DOCTYPE html>

<!-- Fig. 7.9: average2.html -->
<!-- Sentinel-
controlled repetition to calculate a class average. -->
<html>

<head>
    <meta charset="utf-8">
    <title>Class Average Program: Sentinel-
controlled Repetition</title>
    <script>
        var total; // sum of grades
        var gradeCounter; // number of grades entered
        var grade; // grade typed by user (as a string)
        var gradeValue; // grade value (converted to integer)
        var average; // average of all grades

        // initialization phase
        total = 0; // clear total
        gradeCounter = 0; // prepare to loop

        // processing phase
        // prompt for input and read grade from user
        grade = window.prompt(
            "Enter Integer Grade, -1 to Quit:", "0");

        // convert grade from a string to an integer
        gradeValue = parseInt(grade);
```

```
        while (gradeValue != -1) {
            // add gradeValue to total
            total = total + gradeValue;

            // add 1 to gradeCounter
            gradeCounter = gradeCounter + 1;

            // prompt for input and read grade from user
            grade = window.prompt(
                "Enter Integer Grade, -1 to Quit:", "0");

            // convert grade from a string to an integer
            gradeValue = parseInt(grade);
        } // end while

        // termination phase
        if (gradeCounter != 0) {
            average = total / gradeCounter;

            // display average of exam grades
            document.writeln(
                "<h1>Class average is " + average + "</h1>");
        } // end if
        else
            document.writeln("<p>No grades were entered</p>");
    </script>
</head>

<body></body>

</html>
```
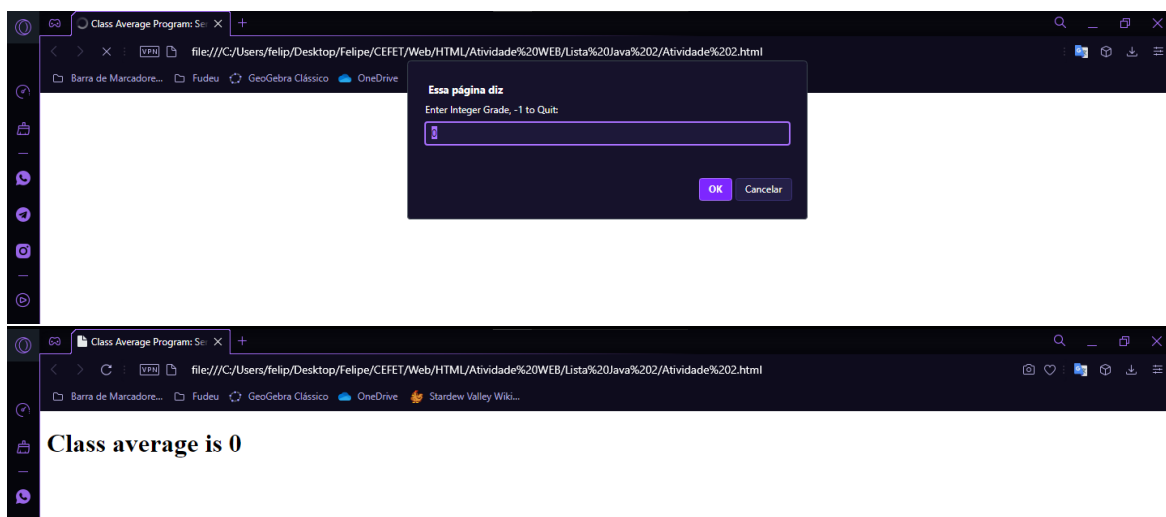
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3 – Código:

```html
<!DOCTYPE html>

<!-- Fig. 7.11: analysis.html -->
<!-- Examination-results calculation. -->
<html>

<head>
    <meta charset="utf-8">
    <title>Analysis of Examination Results</title>
    <script>
        // initializing variables in declarations

        var passes = 0; // number of passes
        var failures = 0; // number of failures
        var student = 1; // student counter
        var result; // an exam result
        // process 10 students; counter-controlled loop
        while (student <= 10) {
            result = window.prompt("Enter result (1=pass,2=fail)",
 "0");

            if (result == "1")
                passes = passes + 1;
            else
                failures = failures + 1;
            student = student + 1;

        } // end while

        // termination phase
        document.writeln("<h1>Examination Results</h1>");
        document.writeln("<p>Passed: " + passes +
            "; Failed: " + failures + "</p>");

        if (passes > 8)
            document.writeln("<p>Bonus to instructor!</p>");
    </script>
</head>

<body></body>

</html>
```
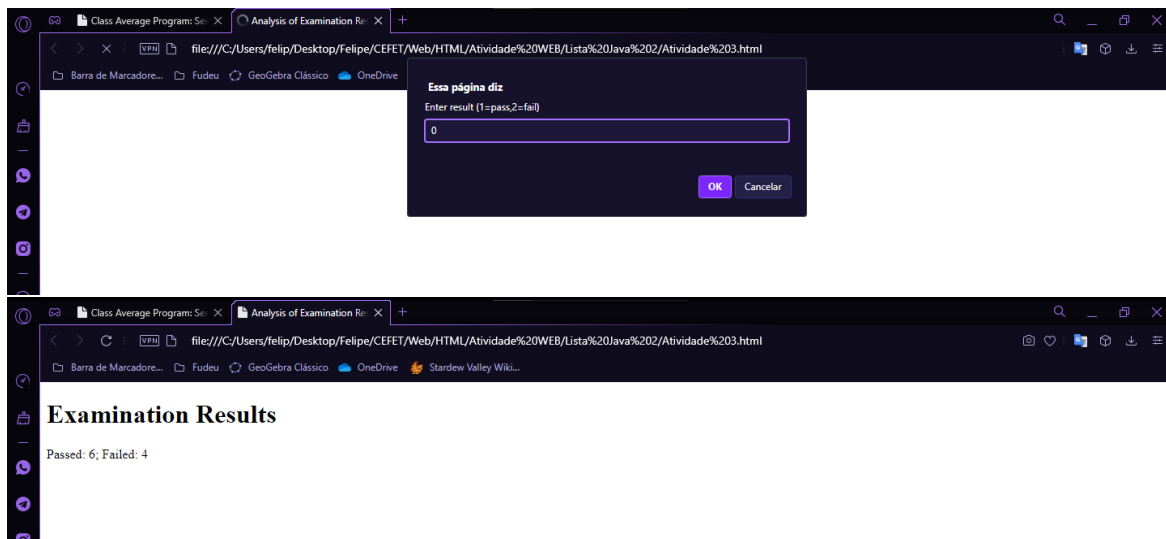
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4 – Código:

```html
<!DOCTYPE html>

<!-- Fig. 7.14: increment.html -->
<!-- Preincrementing and Postincrementing. -->
<html>

<head>
    <meta charset="utf-8">
    <title>Preincrementing and Postincrementing</title>
    <script>
        var c;

        c = 5;
        document.writeln("<h3>Postincrementing</h3>");
        document.writeln("<p>" + c); // prints 5
        // prints 5 then increments
        document.writeln(" " + );
        document.writeln(" " + c + "</p>"); // prints 6

        c = 5;
        document.writeln("<h3>Preincrementing</h3>");
        document.writeln("<p>" + c); // prints 5
        // increments then prints 6
        document.writeln(" " + );
        document.writeln(" " + c + "</p>"); // prints 6
    </script>
</head>

<body></body>

</html>
```

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