

UNIVERSIDAD NACIONAL DE SAN AGUSTÍN
FACULTAD DE INGENIERÍA DE PROCESOS Y SERVICIOS
ESCUELA PROFESIONAL DE INGENIERÍA DE SISTEMAS



Actividad Nro 3
JavaScript

PROGRAMACIÓN WEB 2 - LABORATORIO

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Arequipa-Perú
2025

Problemas del 1 al 5:

Aprendiendo variables con JavaScript

Completed 1 of 67 Exercises:

JS Variables

✓ Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS Variables Tutorial](#)

JS Operators

JS Data Types

JS Functions

Exercise:

Create a variable called `carName`, assign the value `'Volvo'` to it.

```
let carName = "Volvo";
```

Show Answer

Submit Answer >

Completed 1 of 67 Exercises:

JS Variables

✓ Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS Variables Tutorial](#)

JS Operators

JS Data Types

Exercise:

Create a variable called `x`, assign the value `50` to it.

```
let x = 50
```

Show Answer

Submit Answer >

Completed 3 of 67 Exercises:

JS Variables

✓ Exercise 1

✓ Exercise 2

✓ Exercise 3

Exercise 4

Exercise 5

[Go to JS Variables Tutorial](#)

JS Operators

JS Data Types

JS Functions

JS Objects

Exercise:

Display the sum of `5 + 10`, using two variables: `x` and `y`.

```
let x = 5;  
let y = 10;  
document.getElementById("demo").innerHTML = x + y;
```

Show Answer

Submit Answer >

Completed 3 of 67 Exercises:

JS Variables

✓ Exercise 1

✓ Exercise 2

✓ Exercise 3

Exercise 4

Exercise 5

[Go to JS Variables Tutorial](#)

JS Operators

JS Data Types

JS Functions

Exercise:

Create a variable called `z`, assign `x + y` to it, and display the result in an alert box.

```
let x = 5;  
let y = 10;  
let z = x + y;  
alert(z);
```

Show Answer

Submit Answer >

Completed 4 of 67 Exercises:

JS Variables

✓ Exercise 1

✓ Exercise 2

✓ Exercise 3

✓ Exercise 4

Exercise 5

[Go to JS Variables Tutorial](#)

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

Exercise:

On one single line, declare three variables with the following names and values:

```
firstName = "John"
lastName = "Doe"
age = 35
```

```
let firstName = "John", lastName = "Doe", age = 35;
```

Submit Answer >

Show Answer

Problemas del 6 al 10:

Aprendiendo operadores con JavaScript

Completed 5 of 67 Exercises:

JS Variables

JS Operators

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS Operators Tutorial](#)

JS Data Types

JS Functions

Exercise:

Multiply 10 with 5, and alert the result:

```
alert(10 * 5);
```

Submit Answer >

Show Answer

Completed 6 of 67 Exercises:

JS Variables

JS Operators

✓ Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS Operators Tutorial](#)

JS Data Types

JS Functions

Exercise:

Divide 10 by 2, and alert the result:

```
alert(10 / 2);
```

Submit Answer >

Show Answer

Completed 7 of 67 Exercises:

JS Variables

JS Operators

✓ Exercise 1

✓ Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS Operators Tutorial](#)

JS Data Types

JS Functions

Exercise:

Alert the **remainder** when 15 is divided by 9.

```
alert(15 % 9);
```

Submit Answer >

Show Answer

Completed 8 of 67 Exercises:

JS Variables

JS Operators

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

Go to JS Operators Tutorial

JS Data Types

Exercise:

Use the correct **assignment operator** that will result in `x` being 15 (same as `x = x + y`).

```
x = 10;
y = 5;
x += y;
```

Show Answer

Submit Answer >

Completed 9 of 67 Exercises:

JS Variables

JS Operators

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

Go to JS Operators Tutorial

JS Data Types

JS Functions

Exercise:

Use the correct **assignment operator** that will result in `x` being 50 (same as `x = x * y`).

```
x = 10;
y = 5;
x *= y;
```

Show Answer

Submit Answer >

Problema 11:

Aprendiendo los tipos de datos con JavaScript

Completed 10 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

Exercise 1

Go to JS Data Types Tutorial

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise:

Use comments to describe the correct data type of the following variables:

```
let length = 16;           // Number
let lastName = "Johnson"; // String
const x = {
  firstName: "John",
  lastName: "Doe"
};                          // Object
```

Show Answer

Submit Answer >

Problemas del 12 al 15:

Aprendiendo las funciones con JavaScript

Completed 11 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Functions Tutorial

JS Objects

Exercise:

Execute the function named `myFunction`.

```
function myFunction() {
  alert("Hello World!");
}
myFunction();
```

Show Answer

Submit Answer >

Completed 12 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Functions Tutorial

Exercise:

Create a function called "myFunction".

```
function myFunction() {  
  alert("Hello World!");  
}
```

Show Answer

Submit Answer >

Completed 13 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Functions Tutorial

JS Objects

Exercise:

Make the function return "Hello".

```
function myFunction() {  
  return "Hello";  
}  
document.getElementById("demo").innerHTML = myFunction();
```

Show Answer

Submit Answer >

Completed 14 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Functions Tutorial

Exercise:

Make the function display "Hello" in the inner HTML of an element with the ID "demo".

```
function myFunction() {  
  document.getElementById("demo").innerHTML = "Hello";  
}
```

Show Answer

Submit Answer >

Problemas del 16 al 18:

Aprendiendo los objetos con JavaScript

Completed 15 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

Exercise 1

Exercise 2

Exercise 3

Go to JS Objects Tutorial

JS Events

JS Strings

Exercise:

Alert "John" by extracting information from the person object.

```
const person = {  
  firstName: "John",  
  lastName: "Doe"  
};  
  
alert(person.firstName);
```

Show Answer

Submit Answer >

Completed 16 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

Exercise 1

Exercise 2

Exercise 3

Go to JS Objects Tutorial

Exercise:

Add the following property and value to the person object: country: Norway.

```
const person = {  
  firstName: "John",  
  lastName: "Doe",  
  country: "Norway"  
};
```

Show Answer

Submit Answer >

Completed 17 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

Exercise 1

Exercise 2

Exercise 3

Go to JS Objects Tutorial

Go to JS Events Tutorial

Exercise:

Create an object called person with name = John, age = 50. Then, access the object to alert("John is 50").

```
const person = {
  name: "John", age: 50
};
alert(person.name + " is " + person.age);
```

Show Answer

Submit Answer >

Problemas del 19 al 21: Aprendiendo los eventos con JavaScript

Completed 18 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

Exercise 1

Exercise 2

Exercise 3

Go to JS Events Tutorial

Exercise:

The <button> element should do something when someone clicks on it. Try to fix it!

```
<button onclick="alert('Hello')">Click me.</button>
```

Show Answer

Submit Answer >

Completed 19 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

Exercise 1

Exercise 2

Exercise 3

Go to JS Events Tutorial

Exercise:

When the button is clicked, the function "myFunction" should be executed.

```
<button onclick="myFunction()">Click me.</button>
```

Show Answer

Submit Answer >

Sign Up Log in

Completed 20 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

Exercise 1

Exercise 2

Exercise 3

Go to JS Events Tutorial

Exercise:

The <div> element should turn red when someone moves the mouse over it.

```
<div onmouseover="this.style.backgroundColor='red'">myDIV.</div>
```

Show Answer

Submit Answer >

Problemas del 22 al 24: Aprendiendo los eventos con JavaScript

Completed 21 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

Exercise 1

Exercise 2

Exercise 3

Go to JS Strings Tutorial

Exercise:

Use the length property to alert the length of txt.

```
let txt = "Hello World!";
let x = txt.length;
alert(x);
```

Show Answer

Submit Answer >

Completed 22 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

Exercise 1

Exercise 2

Exercise 3

Go to JS Strings Tutorial

Exercise:

Use escape characters to alert We are "Vikings".

```
let txt = "We are \"Vikings\"";
alert(txt);
```

Show Answer

Submit Answer >

Completed 23 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

Exercise 1

Exercise 2

Exercise 3

Go to JS Strings Tutorial

Exercise:

Concatenate the two strings to alert "Hello World!".

```
let str1 = "Hello ";
let str2 = "World!";
alert(str1 + str2);
```

Show Answer

Submit Answer >

Problemas del 25 al 29:

Aprendiendo los métodos de string con JavaScript

Completed 24 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

Go to JS String Methods Tutorial

Exercise:

Convert the text into an UPPERCASE text:

```
let txt = "Hello World!";
txt = txt.toUpperCase();
```

Show Answer

Submit Answer >

Completed 25 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS String Methods Tutorial](#)

Exercise:

Use the slice method to return the word "bananas".

```
let txt = "I can eat bananas all day";
let x = txt.slice( 10, 17);
```

Show Answer

Submit Answer >

Completed 26 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS String Methods Tutorial](#)

Exercise:

Use the correct String method to replace the word "Hello" with the word "Welcome".

```
let txt = "Hello world";
txt = txt.replace("Hello", "Welcome");
```

Show Answer

Submit Answer >

Completed 27 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

[Go to JS String Methods Tutorial](#)

Exercise:

Convert the value of txt to upper case.

```
let txt = "Hello world";
txt = txt.toUpperCase();
```

Show Answer

Submit Answer >

Completed 28 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

Go to JS String Methods Tutorial

Exercise:

Convert the value of `txt` to lower case.

```
let txt = "Hello World";
txt = txt.toLowerCase();
```

Show Answer

Submit Answer >

Problemas del 30 al 32: Aprendiendo los arrays con JavaScript

Completed 29 of 67 Exercises:

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

JS Arrays

Exercise 1

Exercise 2

Exercise 3

Go to JS Arrays Tutorial

JS Array Methods

Exercise:

Get the value "Volvo" from the `cars` array.

```
const cars = ["Saab", "Volvo", "BMW"];
let x = cars[1];
```

Show Answer

Submit Answer >

Completed 30 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

JS Arrays

Exercise 1

Exercise 2

Exercise 3

Go to JS Arrays Tutorial

Exercise:

Change the first item of `cars` to "Ford".

```
const cars = ["Volvo", "Jeep", "Mercedes"];
cars[0] = "Ford";
```

Show Answer

Submit Answer >

Completed 31 of 67 Exercises:

JS Events

JS Strings

JS String Methods

JS Arrays

Exercise 1

Exercise 2

Exercise 3

Go to JS Arrays Tutorial

JS Array Methods

Exercise:

Alert the number of items in an array, using the correct Array property.

```
const cars = ["Volvo", "Jeep", "Mercedes"];
alert(cars.length);
```

Show Answer

Submit Answer >

Problemas del 33 al 35: Aprendiendo los métodos con JavaScript

Completed 32 of 67 Exercises:

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

JS Arrays

JS Array Methods

Exercise 1

Exercise 2

Exercise 3

Go to JS Array Methods Tutorial

Exercise:

Use the correct Array method to remove the last item of the `fruits` array.

```
const fruits = ["Banana", "Orange", "Apple"];
fruits.pop();
```

Show Answer

Submit Answer >

Completed 33 of 67 Exercises:

JS Array Methods

Exercise 1

Exercise 2

Exercise 3

Go to JS Array Methods Tutorial

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

Exercise:

Use the correct Array method to add "Kiwi" to the `fruits` array.

```
const fruits = ["Banana", "Orange", "Apple"];
fruits.push("Kiwi");
```

Show Answer

Submit Answer >

JS Variables

JS Operators

JS Data Types

JS Functions

JS Objects

JS Events

JS Strings

JS String Methods

JS Arrays

JS Array Methods

Exercise 1

Exercise 2

Exercise 3

Use the `splice()` method to remove "Orange" and "Apple" from `fruits`.

```
const fruits = ["Banana", "Orange", "Apple", "Kiwi"];
fruits.splice(1, 2);
```

Show Answer

Submit Answer >

Problema de 36:

Aprendiendo el array sort con JavaScript

Completed 35 of 67 Exercises:

JS String Methods

JS Arrays

JS Array Methods

JS Array Sort

Exercise 1

Go to JS Array Sort Tutorial

JS Dates

JS Math

JS Comparisons

Exercise:

Use the correct Array method to sort the `fruits` array alphabetically.

```
const fruits = ["Banana", "Orange", "Apple", "Kiwi"];
fruits.sort();
```

Show Answer

Submit Answer >

Problemas del 37 al 40:

Aprendiendo dates con JavaScript

Completed 36 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Dates Tutorial

Exercise:

Create a Date object and alert the current date and time.

```
const d = new Date();
alert(d);
```

Show Answer

Submit Answer >

Completed 38 of 67 Exercises:

JS Array Sort

JS Dates

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Dates Tutorial

JS Math

JS Comparisons

JS Conditions

Exercise:

Use the correct Date method to extract the year (four digits) out of a date object.

```
const d = new Date();
year = d.getFullYear();
```

Show Answer

Submit Answer >

Completed 38 of 67 Exercises:

JS Array Sort

JS Dates

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Dates Tutorial

JS Math

JS Comparisons

JS Conditions

Exercise:

Use the correct Date method to get the month (0-11) out of a date object.

```
const d = new Date();
month = d.getMonth();
```

Show Answer

Submit Answer >

Completed 39 of 67 Exercises:

JS Array Sort

JS Dates

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Dates Tutorial

JS Math

JS Comparisons

Exercise:

Use the correct Date method to set the year of a date object to 2020.

```
const d = new Date();
d.setFullYear(2020);
```

Show Answer

Submit Answer >

Problemas del 41 al 44:

Aprendiendo math con JavaScript

Completed 40 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Math Tutorial

JS Comparisons

JS Conditions

Exercise:

Use the correct Math method to create a random number.

```
let r = Math.random();
```

Show Answer

Submit Answer >

Completed 41 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Math Tutorial

JS Comparisons

Exercise:

Use the correct Math method to return the largest number of 10 and 20.

```
let x = Math.max(10, 20);
```

Show Answer

Submit Answer >

Completed 42 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Math Tutorial

JS Comparisons

JS Conditions

Exercise:

Use the correct Math method to round a number to the nearest integer.

```
let x = Math.round(5.3);
```

Show Answer

Submit Answer >

Completed 43 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Math Tutorial

JS Comparisons

JS Conditions

Exercise:

Use the correct Math method to get the square root of 9.

```
let x = Math.sqrt(9);
```

Show Answer

Submit Answer >

Problemas del 45 al 48:

Aprendiendo comparaciones con JavaScript

Completed 44 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

JS Comparisons

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Comparisons Tutorial

JS Conditions

Exercise:

Choose the correct comparison operator to alert true, when x is greater than y.

```
x = 10;  
y = 5;  
alert(x > y);
```

Show Answer

Submit Answer >

Completed 45 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

JS Comparisons

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Comparisons Tutorial

JS Conditions

JS Switch

Exercise:

Choose the correct comparison operator to alert true, when x is equal to y.

```
x = 10;  
y = 10;  
alert(x == y);
```

Show Answer

Submit Answer >

Completed 46 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

JS Comparisons

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Comparisons Tutorial

Exercise:

Choose the correct comparison operator to alert `true`, when `x` is NOT equal to `y`.

```

x = 10;
y = 5;
alert(x    y);

```

Submit Answer >

Show Answer

Completed 47 of 67 Exercises:

JS Array Sort

JS Dates

JS Math

JS Comparisons

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Go to JS Comparisons Tutorial

JS Conditions

Exercise:

Choose the correct conditional (ternary) operator to alert "Too young" if age is less than 18, otherwise alert "Old enough".

```

var age = n;
var voteable = (age < 18) ? "Too young"    "Old enough";
alert(voteable);

```

Submit Answer >

Show Answer

Problemas del 49 y 50:

Aprendiendo condiciones con JavaScript

Completed 48 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

Exercise 1

Exercise 2

Go to JS Conditions Tutorial

Exercise:

Fix the if statement to alert "Hello World" if `x` is greater than `y`.

```

if (x > y) {
  alert("Hello World");
}

```

Submit Answer >

Show Answer

Completed 49 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

Exercise 1

Exercise 2

Go to JS Conditions Tutorial

Exercise:

Fix the if statement to alert "Hello World" if `x` is greater than `y`, otherwise alert "Goodbye".

```

if (x > y) {
  alert("Hello World");
} else {
  alert("Goodbye");
}

```

Submit Answer >

Show Answer

Problemas del 51 y 52:

Aprendiendo switch con JavaScript

Completed 50 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

JS Switch

Exercise 1

Exercise 2

Go to JS Switch Tutorial

JS For Loops

Exercise:

Create a `switch` statement that will alert "Hello" if `fruits` is "banana", and "Welcome" if `fruits` is "apple".

```
switch(fruits) {
  case "Banana":
    alert("Hello")
    break;
  case "Apple":
    alert("Welcome")
    break;
}
```

Show Answer

Submit Answer >

Completed 51 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

JS Switch

Exercise 1

Exercise 2

Go to JS Switch Tutorial

JS For Loops

JS While Loops

Exercise:

Add a section that will alert("Neither") if `fruits` is neither "banana" nor "apple".

```
switch(fruits) {
  case "Banana":
    alert("Hello")
    break;
  case "Apple":
    alert("Welcome")
    break;
  default:
    alert("Neither");
}
```

Show Answer

Submit Answer >

Problemas del 53 y 54:

Aprendiendo for loops con JavaScript

Completed 52 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

JS Switch

JS For Loops

Exercise 1

Exercise 2

Exercise:

Create a loop that runs from 0 to 9.

```
let i;
for (i = 0; i < 10; i++) {
  console.log(i);
}
```

Show Answer

Submit Answer >

Completed 53 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

JS Switch

JS For Loops

Exercise 1

Exercise 2

Exercise:

Create a loop that runs through each item in the `fruits` array.

```
const fruits = ["Apple", "Banana", "Orange"];
for (x of fruits) {
  console.log(x);
}
```

Show Answer

Submit Answer >

Problemas del 55 y 56:

Aprendiendo while loops con JavaScript

Completed 54 of 67 Exercises:

JS Arrays

JS Array Methods

JS Array Sort

JS Dates

JS Math

JS Comparisons

JS Conditions

JS Switch

JS For Loops

JS While Loops

Exercise 1

Exercise 2

Go to JS While Loops Tutorial

Exercise:

Create a loop that runs as long as `i` is less than 10.

```
let i = 0;
while (i < 10) {
  console.log(i);
  i++;
}
```

Submit Answer >

Show Answer