

# ProSensia Internship Report

**Week:** 4

**Day:** 3

**Date:** 7-16-2025

**Intern Name:** Hamza Rafique

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## Topics Covered:

### 1. Operators in JavaScript

- **Arithmetic Operators:** +, -, \*, /, %, \*\*, ++, --
  - **Assignment Operators:** =, +=, -=, \*=, /=, %=, \*\*=
  - **Comparison Operators:** ==, ===, !=, !==, >, <, >=, <=
  - **Logical Operators:** &&, ||, !
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### 2. Conditional Expressions in JavaScript

- **If-Else Example:**

```
js
CopyEdit
if (age >= 18) {
    console.log("Adult");
} else {
    console.log("Minor");
}
```

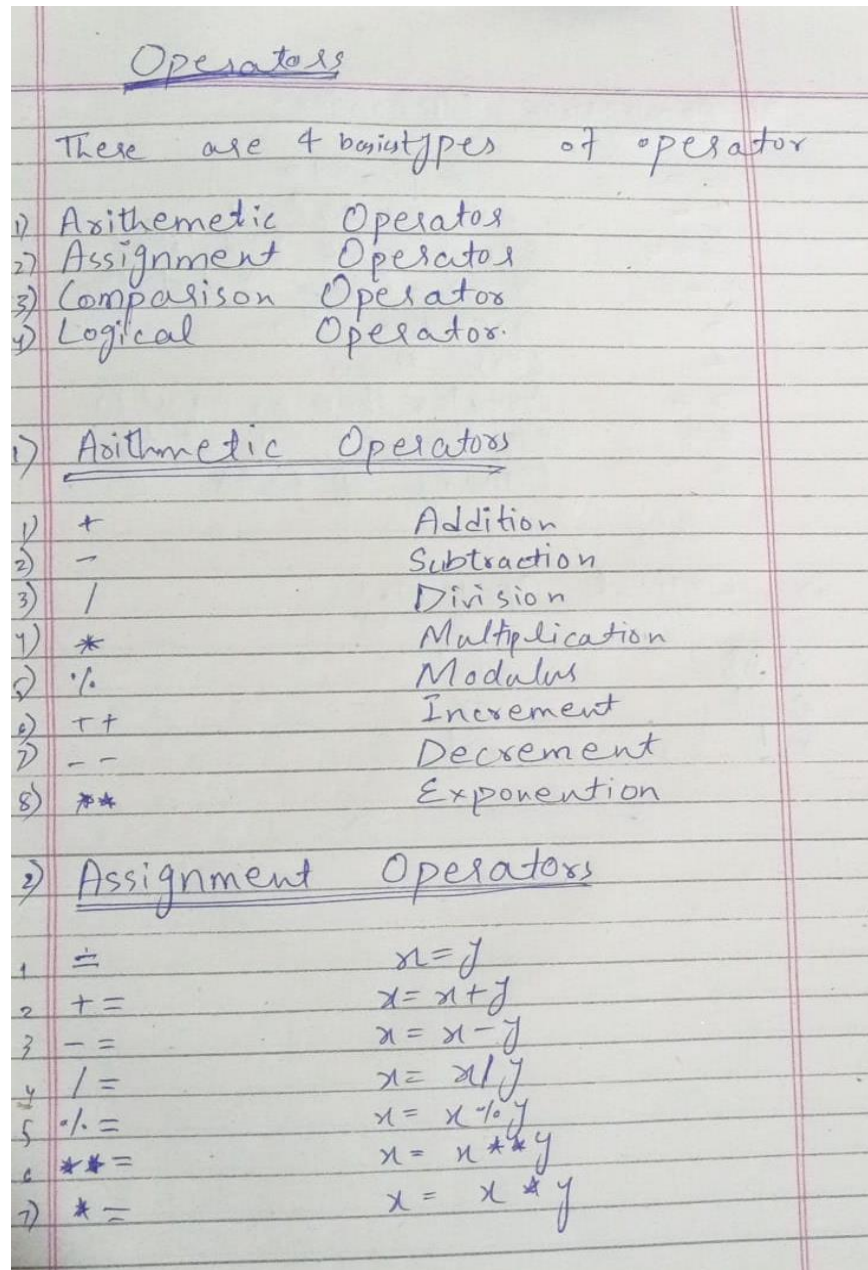
- **Else If Ladder:**

```
js
CopyEdit
if (score >= 90) {
    grade = "A";
} else if (score >= 80) {
    grade = "B";
} else {
    grade = "C";
}
```

- **Ternary Operator:**

```
js
CopyEdit
let result = (marks >= 40) ? "Pass" : "Fail";
```

## Screenshot of Practice Code / Output:

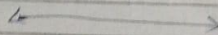


### 3) Comparison Operators

`==` equal to  
`!=` not equal to  
`===` equal value & datatype  
`!==` not equal value & datatype  
`>` Greater than  
`<` Less than  
`>=` Greater than or equal to  
`<=` Less than or equal to  
`?` ternary operator

### 4) Logical Operators

1) `&&` and  
2) `||` or  
3) `!` not



```
main.js
1 let a = prompt("what is your age?")
2 let b = Number.parseInt(a)
3 console.log(b)
4
5 let n=18;
6 if(b>n){
7   console.log("you can drive a car")
8 }
9 else if(b<n){
10  console.log("your age is less than 18 you cant drive")
11 }
12
13 else{
14   console.log("enter the valid age")
15 }
```

Output

```
what is your age?18
18
you can drive a car
--- Code Execution Successful ---
```

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### **What I Learned:**

- How to apply different types of JavaScript operators.
- The difference between `==` and `===`.
- Writing conditional logic using if-else and ternary operators.

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### **Skills Improved:**

- Logical thinking in code
- JavaScript conditionals and operators
- Clean and readable syntax