Conditional statements (if, else if, else)

Sure! Let's explore **Conditional Statements** in JavaScript — particularly the `if` , `else if` , and `else` statements — in a clear and detailed way.

🔍 What Are Conditional Statements?

Conditional statements allow your program to make decisions and execute different blocks of code based on **whether a condition is true or false**.

✅ 1. `if` Statement

Executes a block of code **only if** a specified condition is true.

🔷 Syntax:

```
if (condition) {
  // code to execute if condition is true
}
```

🔷 Example:

```
let age = 20;

if (age >= 18) {
  console.log("You are eligible to vote.");
}
```

🧠 If `age` is 20, the condition is `true` , so it prints the message.

🔄 2. `if...else` Statement

Adds an **alternative block** that runs if the condition is **false**.

🔷 Syntax:

```
if (condition) {
  // code if true
} else {
  // code if false
}
```

🔷 Example:

```
let isRaining = false;

if (isRaining) {
  console.log("Take an umbrella.");
} else {
  console.log("Enjoy the sunshine!");
}
```

🔁 3. if...else if...else Statement

Checks **multiple conditions** one by one until one is true.

🔷 Syntax:

```
if (condition1) {
  // code if condition1 is true
} else if (condition2) {
  // code if condition2 is true
} else {
  // code if none are true
}
```

🔷 Example:

```
let score = 75;

if (score >= 90) {
  console.log("Grade: A");
} else if (score >= 70) {
  console.log("Grade: B");
} else if (score >= 50) {
  console.log("Grade: C");
} else {
  console.log("Grade: F");
}
```

📌 The first true condition gets executed, and the rest are skipped.

⚠️ Key Points

- Only **one block** runs in an `if...else if...else` chain.

- Conditions must return a **boolean** (`true` or `false`).

- You can **nest** `if` **statements**, but avoid making them too deep for readability.

✨ Real-Life Example

```
let temperature = 32;

if (temperature > 30) {
  console.log("It's hot outside.");
} else if (temperature > 20) {
  console.log("Nice weather.");
} else {
  console.log("It's cold.");
}
```

🧪 Summary Table

Statement	Description
if	Executes code if condition is true
else	Executes if the condition is false
else if	Adds more conditions to check

Would you like to try a few **practice exercises** or see a **flowchart** version of this logic?