**Question 1: What is control flow in JavaScript? Explain how if-else statements work with an example.**

**Control Flow in JavaScript:**

Control flow in JavaScript refers to the order in which statements are executed in a program. By default, JavaScript executes code line by line (top to bottom). However, using control flow statements, we can alter this order based on conditions.

One of the most commonly used control flow statements is the if-else statement, which allows decision-making in a program.

**How If-Else Statements Work**

The if-else statement is used to execute code based on a condition.

**Syntax:**

* If the condition evaluates to true, the first block of code inside {} runs.
* If the condition evaluates to false, the else block (if present) executes instead.

**Example:**

let age = 18;

if (age >= 18) {

console.log("You are eligible to vote.");

} else {

console.log("You are not eligible to vote.");

}

**Question 2: Describe how switch statements work in JavaScript. When should you use a switch statement instead of if-else?**

**Switch Statements in JavaScript**

The switch statement in JavaScript is used to execute **one block of code out of multiple options** based on a given value. It is an alternative to multiple if-else statements when checking a single variable against many possible values.

**How the Switch Statement Works**

1. The switch statement evaluates an **expression**.
2. It compares the result to **case values**.
3. If a match is found, the corresponding code block executes.
4. The break statement stops execution after a match is found (to prevent fall-through).
5. If no match is found, the default case executes.

**Syntax:**

let fruit = "Apple";

switch (fruit) {

case "Apple":

case "Banana":

console.log("It's a fruit");

break;

default:

console.log("Unknown item");

}