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// Q1: Program to Grade Students Based on Marks
function gradeStudent(marks) {
   if (marks > 90) {
      console.log("A Grade");
   } else if (marks > 70 && marks <= 90) {
      console.log("B Grade");
   } else if (marks > 50 && marks <= 70) {
      console.log("C Grade");
   } else {
      console.log("F Grade");
   }
}

// Example usage:
gradeStudent(85); // Output: B Grade

// Q2: Generate Numbers Between Any Two Given Numbers
const generateNumbers = (num1, num2) => {
   for (let i = num1 + 1; i <= num2; i++) {
      console.log(i);
   }
}

// Example usage:
generateNumbers(10, 25);
// Output: 11, 12, 13, ..., 25

// Q3: Nested Ternary Operator to Check Positive, Negative, or Zero
const checkNumber = (num) => {
   let result = num > 0 ? "positive" : num < 0 ? "negative" : "zero";
   console.log(result);
```

```
}

// Example usage:
checkNumber(5);  // Output: positive
checkNumber(-3); // Output: negative
checkNumber(0);  // Output: zero

// Q4: Usage of Comma Operator in JavaScript
let x = (1 + 2, 3 + 4);
console.log(x); // Output: 7

// Q7: Weather Application Using Ternary Operator
const checkWeather = (temperature) => {
   let weather = temperature > 30 ? "Hot" : "Moderate";
   console.log(weather);
}

// Example usage:
checkWeather(35); // Output: Hot
checkWeather(25); // Output: Moderate

// Q8: Program to Calculate the Sum of Numbers Using Do-While Loop
function calculateSum(n) {
   let sum = 0;
   let i = 1;
   do {
      sum += i;
      i++;
   } while (i <= n);
   console.log("Sum:", sum);
}
```

// Example usage:

calculateSum(5); // Output: Sum: 15