```
console.clear();

/*
======================================================================

    💻 JavaScript Interview Questions: Conditional Statements 🔥

======================================================================

*/

// 1️⃣ Voting Eligibility Checker

let userAge = 22;

let isCitizen = true;

let isRegistered = true;

// If userAge is greater than or equal to 18 and he/she is a citizen and registered, then he/she is eligible to vote.

if (userAge >= 18 && isCitizen && isRegistered) {

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

// If userAge is less than 18 and he/she is not a citizen or not registered, then he/she is not eligible to vote.

else if (userAge < 18 && (!isCitizen || !isRegistered)) {

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

// If userAge is greater than or equal to 18 and he/she is not a citizen, then he/she is not eligible to vote due to
citizenship status.

else if (userAge >= 18 && !isCitizen) {

```

```
    console.log("❌ Not eligible due to citizenship status.");
}

// If userAge is greater than or equal to 18 and he/she is not registered, then he/she is not eligible to vote due to registration status.

else if (userAge >= 18 && !isRegistered) {

    console.log("❌ Not eligible due to registration status.");
}

else {

    console.log("⚠️ All edge cases handled.");
}

// 2️⃣ Even or Odd Number Checker

let number = 5;

// If number is divisible by 2, then it is an even number else it is an odd number.

console.log(number % 2 === 0 ? "🟢 Even number." : "🔴 Odd number.");

// 3️⃣ Positive, Negative or Zero Checker

let myNumber = 4;

// If number is greater than 0, then it is a positive number.

if (myNumber > 0) {

    console.log("➕ Positive number.");
}

// If number is less than 0, then it is a negative number.

else if (myNumber < 0) {
```

```
75
76      console.log("➖ Negative number.");
77  }
78
79  // Else, it is a zero.
80
81  else {
82
83      console.log("🟡 Number is zero.");
84  }
85
86  // 4️⃣ Leap Year Checker
87
88  let year = 2024;
89
90  // If the year is divisible by 4 and not divisible by 100, or if the year is divisible by 400, then it is a leap year.
91
92  if ((year % 4 === 0 && year % 100 !== 0) || (year % 400 === 0)) {
93
94      console.log(`📅 ${year} is a Leap Year.`);
95  }
96
97  // Else, it is not a leap year.
98
99  else {
100
101     console.log(`📅 ${year} is not a Leap Year.`);
102 }
103
104 // 5️⃣ Largest of Three Numbers
105
106 let num1 = 45, num2 = 72, num3 = 89;
107
108 // If all numbers are equal, then print "All numbers are equal."
109
110 if (num1 === num2 && num2 === num3) {
111
112     console.log("⚖️ All numbers are equal.");
```

```
}

// If num1 is greater than num2 and num1 is greater than num3, then print "num1 is the largest number."

else if (num1 > num2 && num1 > num3) {

    console.log(`${num1} is the 🔝 largest number.`);
}

// If num2 is greater than num1 and num2 is greater than num3, then print "num2 is the largest number."

else if (num2 > num1 && num2 > num3) {

    console.log(`${num2} is the 🔝 largest number.`);
}

// Else, num3 is the largest number.

else {

    console.log(`${num3} is the 🔝 largest number.`);
}

// 6️⃣ Vowel or Consonant Checker

let char = 'O'.toLowerCase();

// If the character is a lowercase alphabet, check if it is a vowel or a consonant.

if (char >= 'a' && char <= 'z') {

    // If the character is 'a', 'e', 'i', 'o', or 'u', print "Vowel".

    if ("aeiou".includes(char)) {

        console.log("🗣️ Vowel");
    }

```

```
    // Else, print "Consonant".

    else {

        console.log("🔡 Consonant");
    }
}

// Else, print "Invalid character input."

else {

    console.log("❌ Invalid character input.");
}

// 7️⃣ ATM Withdrawal System

let balance = 1000;

let withdrawAmount = 250;

// Check if the withdrawal amount is greater than the balance or not

if (withdrawAmount > balance) {

    console.log("💸 Insufficient funds.");
}

// Check if the withdrawal amount is a multiple of 10

else if (withdrawAmount % 10 !== 0) {

    console.log("💡 Enter a valid amount (multiple of 10).");
}

// Deduct the withdrawal amount from the balance

else {
```

```
189
190     balance = balance - withdrawAmount;
191
192     console.log(`✅ Withdrawal successful! 💰 Remaining balance: $${balance}`);
193 }
194
195 // 8️⃣ Grade Calculator
196
197 let percentage = 85;
198
199 // If percentage is between 90 and 100, print "Grade: A".
200
201 if (percentage >= 90 && percentage <= 100) {
202
203     console.log("🎓 Grade: A");
204 }
205
206 // If percentage is between 80 and 90, print "Grade: B".
207
208 else if (percentage >= 80) {
209
210     console.log("🎓 Grade: B");
211 }
212
213 // If percentage is between 70 and 80, print "Grade: C".
214
215 else if (percentage >= 70) {
216
217     console.log("🎓 Grade: C");
218 }
219
220 // If percentage is between 60 and 70, print "Grade: D".
221
222 else if (percentage >= 60) {
223
224     console.log("🎓 Grade: D");
225 }
226
```

```
// Else, print "Grade: F".

else {

    console.log("🎓 Grade: F");
}

// 9️⃣ Armstrong Number Checker (Three-digit only): If a number is an Armstrong number, it is equal to the sum of its own digits raised to the power of the number of digits.

// 153 = 1^3 + 5^3 + 3^3

let num = 153;

// Storing the original number for later use

let originalNum = num;

// Initialize a variable to store the sum

let sum = 0;

// Loop through each digit and calculate the sum

while (num > 0) {

    // Get the last digit

    let digit = num % 10;

    // Add the digit to the sum

    sum += digit ** 3;

    // Remove the last digit

    num = Math.floor(num / 10);
}
```

```
264
265 // Check if the sum is equal to the original number
266
267 if (sum === originalNum) {
268
269     console.log(`🔢 ${originalNum} is an Armstrong Number.`);
270 }
271
272 else {
273
274     console.log(`🔢 ${originalNum} is NOT an Armstrong Number.`);
275 }
276
277 // 🔟 Switch Statement Example
278
279 let day = 3;
280
281 let dayName = "";
282
283 // If day is 1, then dayName is Monday and so on
284
285 switch (day) {
286
287     case 1: dayName = "Monday"; break;
288
289     case 2: dayName = "Tuesday"; break;
290
291     case 3: dayName = "Wednesday"; break;
292
293     case 4: dayName = "Thursday"; break;
294
295     case 5: dayName = "Friday"; break;
296
297     case 6: dayName = "Saturday"; break;
298
299     case 7: dayName = "Sunday"; break;
300
301     default: dayName = "Invalid day"; break;
```

```
}

console.log(`📅 Today is: ${dayName}`);
```