Student Activity: Major and Desired Salary Script

Title: JavaScript Activity: Using Logical Operators in If Statements

Introduction:

In this self-directed activity, you'll create a JavaScript program that asks the user for their major and desired salary. You'll practice using prompt(), logical operators (&&, ||), .includes(), and if/else statements to display personalized messages based on the user's input.

Step 1: Ask for the User's Major

Instructions:

Use the prompt () function to ask the user for their major and store it in a variable called major. Convert the input to lowercase so comparisons aren't case-sensitive.

Code to add:

```
const major = prompt("What is your major?").toLowerCase();
```

Step 2: Check the Major Using If and Logical Operators

Instructions:

Use an if statement with the || (OR) operator to check if the major is "computer science" or "software development". Display a message if it matches.

Code to add below the prompt:

```
if (major === "computer science" || major === "software development") {
    console.log("Your major involves a lot of problem-solving and technical
    skills!");
}
```

Step 3: Add Another Condition with .includes()

Instructions:

Check if the major includes the word "arts" or is "english". Use another else if statement and display a message about creativity and communication.

Code to add:

```
else if (major.includes("arts") || major === "english") {
    console.log("Your major focuses on creativity, communication, and
critical thinking!");
}
```

Step 4: Add a Default Message

Instructions:

Add an else statement that displays a generic message for any other majors.

Code to add:

```
else {
    console.log("That's an interesting major! I hope you enjoy it.");
}
```

Step 5: Ask for Desired Salary

Instructions:

Prompt the user to enter their desired salary and store it in a variable called desiredSalary.

Code to add:

```
let desiredSalary = prompt("What is your desired salary?");
```

Step 6: Check Salary and Major Together

Instructions:

Use if with && (AND) and $|\cdot|$ (OR) to display a message if the user's salary is greater than 50,000 and their major is "computer science" or "software development".

Code to add:

```
if (desiredSalary > 50000 && (major === "computer science" || major ===
"software development")) {
    console.log("You have a technical mind!");
}
```

Step 7: Test Your Script

- Run your program in the browser console or Replit.
- Try different combinations of majors and salaries to see the messages.
- Checkpoint: Does each condition display the correct message?

Step 8: Challenge

Extend the program:

- Add more majors (like "biology" or "education") with custom messages.
- Add more salary ranges with different messages (e.g., <40000, 40000-50000).

Example

```
else if (major === "biology") {
    console.log("You're exploring the science of life!");
}
else if (major === "education") {
    console.log("You're preparing to inspire and teach others!");
}
```

Full Script Example

```
// Allison Hanna
// 03/15/25
// Practice if else and logical operators
const major = prompt("What is your major?").toLowerCase();
if (major === "computer science" || major === "software development") {
   console.log("Your major involves a lot of problem-solving and technical
skills!");
else if (major.includes("arts") || major === "english") {
   console.log("Your major focuses on creativity, communication, and
critical thinking!");
else {
   console.log("That's an interesting major! I hope you enjoy it.");
let desiredSalary = prompt("What is your desired salary?");
if (desiredSalary > 50000 && (major === "computer science" || major ===
"software development")) {
   console.log("You have a technical mind!");
```

Reflection

Write one or two sentences about what you learned using if, else if, logical operators (&&, ||), and .includes():