Real World Practice Coding Question on Symbols:

In a banking application, you need to implement a function that generates unique transaction IDs. Each transaction ID should be a symbol that is not equal to any other transaction ID generated by the system. Write a function generateTransactionId that takes no parameters and returns a new unique transaction ID as a symbol.

Example usage:

const transaction1 = generateTransactionId();

console.log(transaction1); // Symbol(TRANSACTION_ID_1)

const transaction2 = generateTransactionId();

console.log(transaction2); // Symbol(TRANSACTION_ID_2)

const transaction3 = generateTransactionId();

console.log(transaction3); // Symbol(TRANSACTION_ID_3)

Hint:

- You can use the Symbol() constructor to create a new unique symbol.
- You can generate a unique string for each transaction ID by concatenating a constant string with a unique number generated by incrementing a counter each time a new transaction ID is generated.

JavaScript Best Practices:

- Use descriptive function and variable names.
- Use meaningful comments to explain your code.
- Avoid using global variables whenever possible.
- Use the const keyword to declare variables that won't be reassigned.
- Follow the principle of least privilege by making variables and functions as private as possible.