Day-2

Assignment

1. **write the differences between var, let and constant.**
2. **Var:** var can be function-scoped meaning it is available throughout the function , it can be re-assigned and re-declared.

**Let:** let is a block-scoped meaning it is only available within the block of curly braces ({}) where it is declared. It can be re-assigned but not re-declared.

**Constant:** constant is also a block-scoped. It cannot be re-declared or re-assigned.

1. **write the differences between block, global, module and function scope.**
2. **Global scope:** Variables declared in the global scope are accessible from anywhere within the entire program. They are not confined to any specific function, block, or module.

**Block-scope:** Introduced with let and const keywords. Block scope means variables are limited to the block of code (defined by curly braces {}) in which they are declared.

**Function-scope:** variables declared inside a function are only accessible within that function and its nested functions. They are not accessible outside the function where they are defined.

**Module-scope:**In module-based systems, variables declared at the top level of a module are scoped to that module. They are not globally accessible unless explicitly exported and imported.

1. **write the differences between primitive and non-primitive data types.**
2. **Primitive datatype:** Primitive data types are simple, built-in types that store a single value directly. These are immutable and stored in the stack.

**Non-primitive datatype:** Non-primitive types are more complex, store references to objects, and can hold multiple values. These are mutable and stored in the heap, can be null.

1. **what are identifiers and explain the rules for identifiers.**
2. Identifiers are names used in programming to identify variables, functions, classes, and other entities.

**Rules:**

* The identifier should not start with any number and any special characters except “$” and “\_”.
* Should not use keywords.
* Identifiers should not contain white spaces.