HIBAQ SULEIMAN GOSAR ASSIGNMENT OF JAVASCRIPT

1. With sited examples give the different between Let, Const and Var keywords in JavaScript.

ANS: LET- Variables declared with let are hoisted, but they are not initialized until the line of declaration is executed. If you try to access the variable before declaration, it will throw a Reference Error LET is a modern variable declaration

```
Example with LET:
    let z = 50;
    console.log(z); // Output: 50

z = 60; // Reassigning a variable declared with let
    console.log(z); // Output: 60

// let z = 70; // Error: Cannot redeclare block-scoped variable 'z'

ANS: VAR- eclarations are hoisted to the top of their scope but initialized with undefined. This means you can reference a variable declared with var before its actual declaration line

Var is old school varibles declaration

Example with var
function testVar() {
    if (true) {
    var x = 10; // x is scoped to the function, not the block
    }
    console.log(x); // Output: 10, x is accessible outside the if block
```

testVar();

ANS: CONST- dariables declared with const are **hoisted**, but they cannot be accessed before the declaration (similar to let) Const it is used to declared unchanged variables

Example with const

```
const person = { name: 'John', age: 30 };
console.log(person); // Output: { name: 'John', age: 30 }

person.age = 31; // Allowed: modifying properties of the object console.log(person); // Output: { name: 'John', age: 31 }
```

person = { name: 'Jane', age: 25 }; // Error: Assignment to constant variable