

# VAR LET CONST

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## Topics

1. variable shadowing
2. Declaration
3. Declaration without initialisation
4. Hoisting
5. Temporal deadzone

## Scope

Scope in JavaScript refers to the context in which variables and functions are accessible. It determines where a variable or function can be used within the code. There are three main types of scope: global scope, function scope, and block scope. Global scope makes variables accessible everywhere in the code, function scope restricts them to within a specific function, and block scope limits them to a particular block of code, like within curly braces {}."

### 1.Global Scope

### 2.Function Scope

### 3.local Scope/Block Scope

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## local Scope/Block Scope

{ } in bracket ke andar jo value aayegi vo local scope hojyegi

```
if (true){
    let a= 1;
    const b=2;
    var c=3;
    local scope-> ye saari variable locally use krsktte means {} means bracket ke
    andar ,bracket ke outside may value get kruga too error(undefined) show hojyga
}
console.log(a)
console.log(b)
console.log(c)

output -
console.log(a) undefined
```

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## Global Scope

Global scope mean define variable ko bracket ke andr bhi access kr skte or outside bhi in dono case may value milegi koue error nhi aayega

```
let a= 1;
const b=2;
var c=3;

if (true){
  console.log(a)
  console.log(b)
  console.log(c)
}

console.log(a)
console.log(b)
console.log(c)
```

output

```
1
2
3
1
2
3
```

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### Problem with Var

```
var a= 5;

if(true){
  var a= 10;
  console.log(a)
  iss console may value 10 aayegi
}
console.log(a)
lekin outside vale console may bhi value 10 aayegi jo ki problem ha
muje to 5 output chahiye tha
```

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NOTE = that the Reason Always use let instead var

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### Interview question

vs code se node may code run krne pr scopes differenct output dega or  
agr vohi code chrome may run hoga to output differenct hoga

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## Nested Scopes

also called "Hoisting"

```
function add(){  
  <!-- parent function -->  
  let a= 5  
  function sun(){  
    <!-- child function -->  
    let b=6  
    child fun parent funtion ki value use krskta ha  
    console.log(a)  
    output  
    5  
  
  }  
  console.log(b) error hoga kyuki  
  parent fun child funtion ki value use nhi krskta ha  
  sun()  
}  
add()
```