

# Full stack web development using python

## JavaScript variables and types



Saurabh Shukla (MySirG)

# Agenda

- ① variables
- ② Data types

# Variables

Variables are containers that you can store values in.

There are 4 ways to declare variables

var x;

let y;

const z;

a=2;

Variable name is any combination of alphabets, digits, underscore and dollar sign.

## let and var

You can use let keyword instead of var,  
the difference is in their scope.

var → function scope

let → block scope

```
<script>
```

```
    function f1() {  
        {  
            var a=10;  
            let b=10;  
            alert ("a=" + a + " b=" + b)  
        }  
        alert ("a=" + a)  
        alert ("b=" + b) //error
```

```
}
```

```
f1()
```

```
</script>
```

`var x;` ←  $x$  contains undefined

`a=2;` ← declaring variable  
without using any  
keyword

## const

The const keyword was introduced in 2015  
Variables defined with const cannot be  
redeclared or reassigned and of block  
scope.

const x; error

const x = 5; Right

## Data Types

String

Number

BigInt

Boolean

Undefined

Null

Object

Symbol

`typeof()` method  
returns the type of  
data.

## Number vs BigInt

```
x = BigInt(123456789123456789)
```

```
x = x + BigInt(5)
```

```
alert(x)
```

---

```
x = 123456789123456789
```

```
x = x + 5
```

```
alert(x)
```

## Object, Undefined and NULL

```
x = {a:1, b:2}
```

```
document.write(x.a + " " + x.b + " "+typeof(x))
```

---

```
var x;
```

```
document.write( x + typeof(x))
```

---

```
var a = null
```

## Symbol

Var x = Symbol("hello")

Var y = Symbol("hello")

x and y are different

x == y    false