

JavaScript Variables

A variable is a storage location and an associated symbolic name (an identifier) which contains some known or unknown quantity or information, a value.

`var quantity;` declaration

`quantity=3;` initialization

`var quantity=3;` declaration+initialization

Data Types

Numeric	0.75
String	"Hello class"
Boolean	true / false

Numeric

```
var price;  
var quantity;  
var total,  
price=5;  
quantity=3;  
total=price*quantity;  
  
var el=document.getElementById('cost');  
el.textContent='$'+total;
```

String

```
var username;  
var message;  
username='Molly';  
Message="see our upcoming range";
```

```
var elName=document.getElementById('name');  
elName.textContent=username;  
var elNote=document.getElementById('note');  
elNote.textContent=message;
```

Boolean

```
var inStock;
```

```
var shipping;
```

```
inStock=true;
```

```
shipping=false;
```

```
var elStock=document.getElementById('stock');
```

```
elStock.className=inStock;
```

```
var elShip=document.getElementById('shipping');
```

```
elShip.className=shipping;
```

Naming variables

Must begin with a letter

Can contain letters, numbers, \$ or _ (no . Or hyphen-)

Cannot contain reserved keywords such as “if”, “while”, etc.

Case sensitive

Descriptive

No spaces

Arithmetic Operators

+ addition

- Subtraction

/ division

* Multiplication

++ Increment

-- Decrement

% modulus

Arrays

A list of values

```
var colors;  
colors=['white','black','orange'];
```

```
var el = document.getElementById('colors');  
el.textContent=colors[0];
```


Arrays

```
colors=['white','black','orange'];
```

Index value

0 'white'

1 'black'

2 'orange'

```
var allColors;
```

```
allColors=colors.length;
```

Arrays

```
var colors;  
colors=['white','black','orange'];  
Colors[2]='beige';  
  
var el = document.getElementById('colors');  
el.textContent=colors[2];
```

Arrays

```
<html>
<head>
<title>bgcolor_change</title>
<script language="JavaScript">
var myPix = new Array("red","blue","green")
function choosePic()
{
    randomNum = Math.floor(Math.random()*myPix.length)
    document.bgColor=myPix[randomNum]
}
```

Arrays

```
</script>
```

```
</head>
```

```
<body>
```

```
<center>
```

```
  <a href="#" onmousedown="choosePic()"> random bgcolor</a>
```

```
</center>
```

```
</body>
```

```
</html>
```