

Javascript

Séance 1

Environnement de développement

- ✖ Eclipse Juno
- ✖ A charger et installer sur gfs
- ✖ 2 plug-ins
 - ✖ Javascript Development Tools
 - ✖ Web page editor

Dans une page Web

```
<script type="text/javascript">  
  alert("bonjour");  
</script>
```

Dans une page Web

page Web

```
<script type="text/javascript"  
src="fichier.js">  
</script>
```

fichier.js

```
alert ("bonjour");
```

4 fonctions à connaître

```
document.write ("bonjour");
```

```
alert ("message");
```

```
valeur=prompt  
("Invitation",  
"valeur de base");
```

```
console.log ("bonjour");
```

Variables

variable local

```
var x=3
```

variable globale

```
nomVariable=prompt  
("Nom de la variable globale");  
window[nomVariable]=2
```

Les boucles

for `for (var i=0; i<10; i++) {}`

while `while (condition) {}`

do-while `do {} while (condition);`

Types de valeur

```
> typeof(1)
"number"
> typeof(true)
"boolean"
> typeof("bonjour")
"string"
> typeof([1,2,3])
"object"
> typeof({nom : "Doe", prenom : "John"})
"object"
> typeof(function f() {} )
"function"
```


Les nombres

utilisation

```
var a = new Number(3);  
var b = 2;  
var c=b+a.valueOf(); // ou b+a
```

```
> isNaN("3")  
false  
> isNaN("bonjour")  
true  
> parseInt(3.2)  
3  
> parseInt("3.2")  
3
```

Des fonctions

Les chaînes de caractères

utilisation

```
var s1="bonjour";  
var s2=new String("salut");
```

Des fonctions

```
> "bonjour".bold()  
"<b>bonjour</b>"  
> "bonjour,à,vous".split(",")  
["bonjour", "à", "vous"]  
> "bonjour".link("http://bonjour.com")  
"<a href='http://bonjour.com'>bonjour</a>"
```

Tableaux

utilisation

```
var tab = new Array(3, "bonjour", true);  
var tab = [ 3, "bonjour", true ];
```

Tableaux

Des fonctions

```
> a=[1,2]
[1, 2]
> a.push(3)
3
> a
[1, 2, 3]
```

The diagram illustrates a sequence of operations on an array 'a'. It starts with an initial state box, followed by a 'push' operation box, then a 'shift' operation box, and finally a 'forEach' operation box. Arrows connect these boxes in sequence, showing the progression of the array's state.

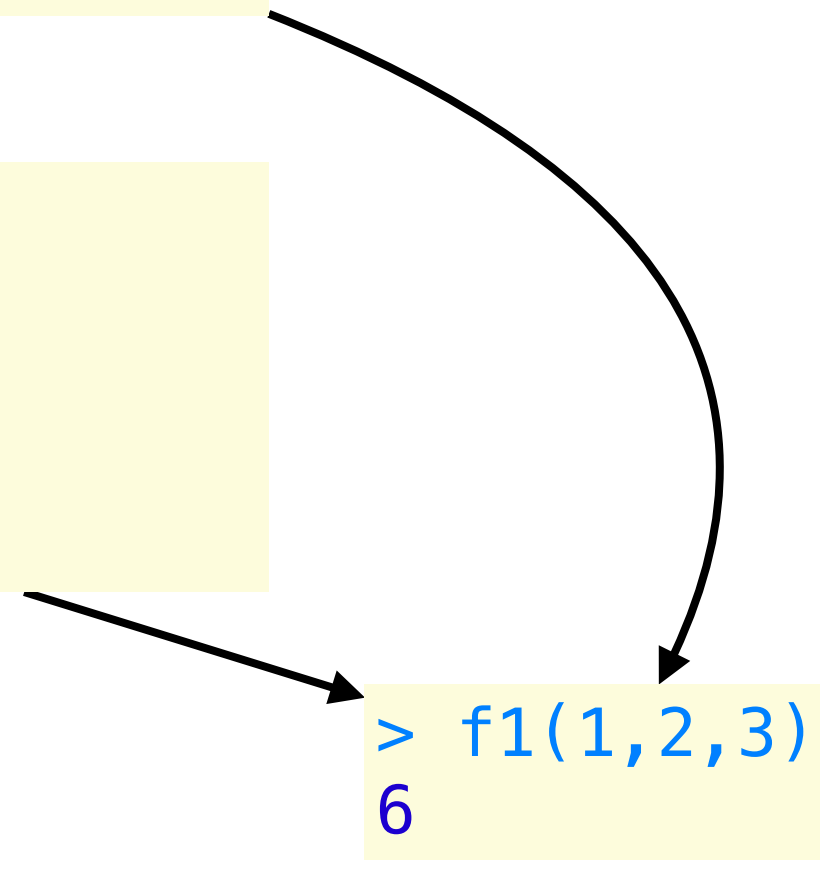
```
> a.shift()
1
> a
[2, 3]
```

```
> a.forEach(function (element,index,array)
{array[index]=element*2;})
undefined
> a
[4, 6]
```

Les fonctions

```
function f1(a,b,c) {  
  return a+b+c;  
}
```

```
f1 = function(a,b,c) {  
  return a+b+c;  
}
```




The diagram consists of two yellow boxes containing code. The top box contains a function definition for f1. The bottom box contains an assignment of f1 to a new function object. Arrows point from the right side of both boxes to a third yellow box at the bottom right. This box contains a prompt character followed by a function call and its return value.

```
> f1(1,2,3)  
6
```

Les fonctions

```
function addition () {  
  var resultat = 0;  
  for (var i=0;i<arguments.length;i++)  
    if (typeof(arguments[i]) == "number")  
      resultat+=arguments[i];  
  return resultat;  
}
```



```
> addition(1,2,3)  
6
```

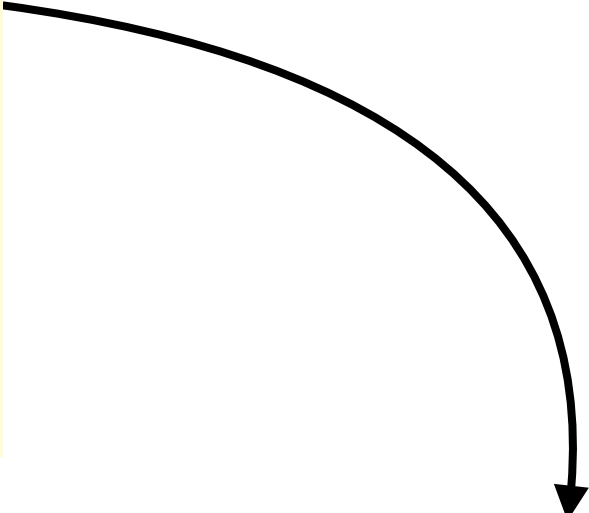
Les objets

```
var client = {  
    nom      : "Le Pallec",  
    prenom   : "Xavier" ,  
    age      : 35  
};
```

```
var client = new Object();  
client.nom = "Le Pallec";  
client.prenom = "Xavier";  
client["age"] = 35;
```

Les objets

```
obj = {  
  a : 1 ,  
  b : "tac",  
  c : true ,  
  contenu : function () {  
    var contenu="";  
    for (var c in this)  
      contenu+=this[c];  
    return contenu;  
  }  
}
```



```
> obj.contenu()  
"1tactruefunction () {var contenu=""; for  
(var c in this) contenu+=this[c]; return  
contenu;}"
```


DOM & HTML

```
a=document.  
  getElementsByTagName("body")[0];  
  
b=document.createElement("P");  
  
a.appendChild(b);  
  
b.appendChild(  
  document.createTextNode("bonjour")  
);
```

Événement

```
b.addEventListener(  
  "click",  
  {  
    handleEvent : function (event) {  
      alert(event.target+this.x)  
    },  
    x : 3  
  },  
  false );
```

