

## # Source Code transformations

For all global built-in objects, functions, and libraries:

- rename global variables by adding prefix **AG**
- create a surrogate object with new name
- exception for **instanceof**
- Enclose all non-number property names in `backticks`
- Replace **a[b]** with **ACgetItemB(a,b) \***
- Replace **a.b** with **ACgetItemD(a,"b") \***

```
var f = function f (x) {  
  console.log(x);  
  return {  
    foo : 'bar',  
    '10' : 20  
  };  
};
```

```
var f = function f (x) {  
  ACgetItemD(AGconsole, "`log`") (x);  
  return {  
    '`foo`' : 'bar',  
    '10' : 20  
  };  
};
```

## # Runtime Transformations

- **ACgetItemB(a,"b")** returns **a["`b`"]**
- if (**! isNaN(y)**), then  
    **ACgetItemB(x,y)** returns **x[y]**
- **ACgetItemD(a,"length")** returns **a.length**, ...