

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

程式一讀到這個檔案的
時候，產生
global EC {
}
EC 裡面又有 VO



Terminal

global EC
global VO {

}

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說


先看有宣告哪些變數
並照順序

1. 參數 2. 函式 3. 變數



Terminal

global EC
global VO{
 fn: function
 a: undefined
}



```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

a 賦值為 1



```
global EC
global VO{
  fn: function
  a: 1
}
```

Terminal

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

執行 fn()，產生

```
fn EC {
}
```

EC 裡面又有 VO

```
fn EC
fn VO{
```

```
}
```

```
global EC
global VO{
  fn: function
  a: 1
}
```




Terminal

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

先看有宣告哪些變數
並照順序

1. 參數 2. 函式 3. 變數



```
fn EC
fn VO{
  fn2: function
  a: undefined
}

global EC
global VO{
  fn: function
  a: 1
}
```



Terminal


```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 a ，所以去 fn 的
VO 裡面找 a 找到
undefined

fn EC
fn VO{
 fn2: function
 a: undefined
}

global EC
global VO{
 fn: function
 a: 1
}

Terminal

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 undefined

undefined

Terminal

```
fn EC
fn VO{
  fn2: function
  a: undefined
}

global EC
global VO{
  fn: function
  a: 1
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

找出 a ，在 VO 有 a ，賦
值 5

undefined

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 5
}
global EC
global VO{
  fn: function
  a: 1
}
```



```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 a ，所以去 fn 的
VO 裡面找 a 找到 5

undefined

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 5
}
global EC
global VO{
  fn: function
  a: 1
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 5

undefined
5

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 5
}

global EC
global VO{
  fn: function
  a: 1
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

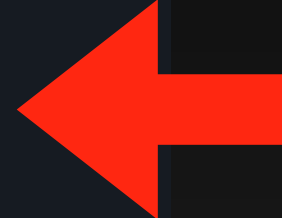
a++ 變成 6

```
undefined
5
```

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 6
}
global EC
global VO{
  fn: function
  a: 1
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```



步驟解說

又宣告一次 a，不過因為 a 已經存在，所以這個宣告可以視為不存在

```
undefined
5
```

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 6
}

global EC
global VO{
  fn: function
  a: 1
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

執行 fn2()，產生

fn2 EC {
}

EC 裡面又有 VO

fn2 EC
fn2 VO{

}

fn EC
fn VO{
 fn2: function
 a: 6
}

global EC
global VO{
 fn: function
 a: 1
}

undefined
5

Terminal


```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

先看有宣告哪些變數
並照順序

1. 參數 2. 函式 3. 變數
都沒有宣告，所以 VO 是
空的

```
undefined
5
```

Terminal

```
fn2 EC
fn2 VO{
}
fn EC
fn VO{
  fn2: function
  a: 6
}
global EC
global VO{
  fn: function
  a: 1
}
```

```

var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)

```

步驟解說

要印出 a 的值，所以去
fn2 VO 找 a，找不到 a

往外層找，找到 fn VO
找到 a 是 6

undefined
5

Terminal

```

fn2 EC
fn2 VO{
}

fn EC
fn VO{
  fn2: function
  a: 6
}

global EC
global VO{
  fn: function
  a: 1
}

```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

印出 6

undefined
5
6

Terminal

```
fn2 EC
fn2 VO{

}

fn EC
fn VO{
  fn2: function
  a: 6
}

global EC
global VO{
  fn: function
  a: 1
}
```

```

var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)

```

步驟解說

要賦上 a 新的值，所以
去 fn2 VO 找 a，找不到 a

往外層找，找到 fn VO
找到 a，所以賦值為 20

```

undefined
5
6

```

Terminal

```

fn2 EC
fn2 VO{
}

fn EC
fn VO{
  fn2: function
  a: 20
}

global EC
global VO{
  fn: function
  a: 1
}

```



```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要賦上 b 新的值，所以去 fn2 VO
找 b，找不到

往外層 fn VO 找，也找不到

往外層 global VO 找，也找不到，
於是在 global VO 宣告 b，
賦值為 100

```
undefined
5
6
```

Terminal

fn2 EC
fn2 VO{

}

fn EC
fn VO{

fn2: function
a: 20

}

global EC
global VO{

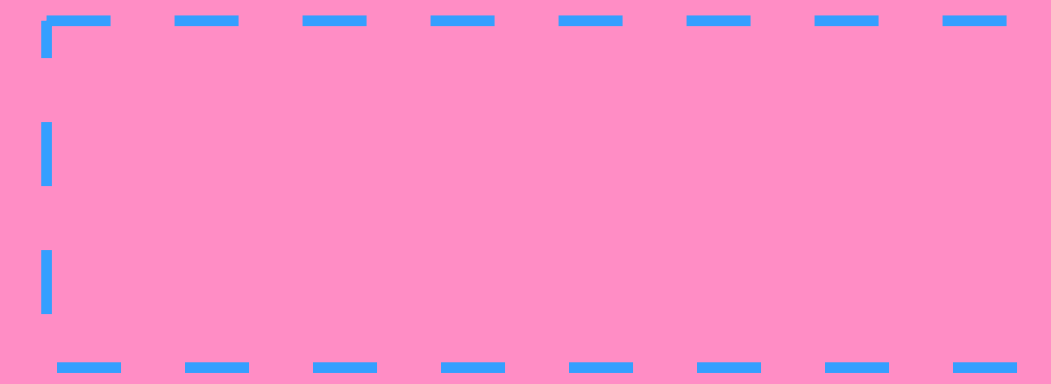
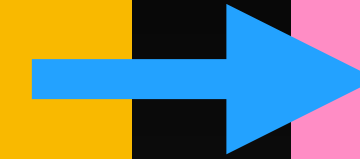
fn: function
a: 1
b: 100

}

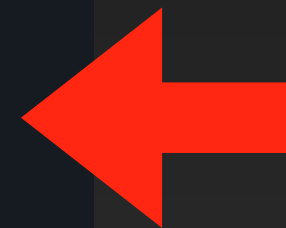

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

fn2 執行完畢，fn2 EC
VO 關閉



fn EC
fn VO{
 fn2: function
 a: 20
}
global EC
global VO{
 fn: function
 a: 1
 b: 100
}



```
undefined
5
6
```

Terminal

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 a ，所以去 fn 的
VO 裡面找 a 找到 20

```
undefined
5
6
```

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 20
}
global EC
global VO{
  fn: function
  a: 1
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 20

undefined
5
6
20

Terminal

```
fn EC
fn VO{
  fn2: function
  a: 20
}
global EC
global VO{
  fn: function
  a: 1
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

fn 執行完畢，fn EC VO
關閉

```
undefined
5
6
20
```

Terminal

global EC
global VO{
 fn: function
 a: 1
 b: 100
}

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 a 的值，所以去
global VO 找 a，值是 1

```
undefined
5
6
20
```

Terminal

```
global EC
global VO{
  fn: function
  a: 1
  b: 100
}
```



```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 1

undefined
5
6
20
1

Terminal

```
global EC
global VO{
  fn: function
  a: 1
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要賦上 a 新的值，在
global VO 找到 a，並賦
上值 10

```
undefined
5
6
20
1
```

Terminal

```
global EC
global VO{
  fn: function
  a: 10
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 a ，所以找到
a ，值是 10

```
undefined
5
6
20
1
```

Terminal

```
global EC
global VO{
  fn: function
    a: 10
    b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

印出 10

undefined
5
6
20
1
10

Terminal

```
global EC
global VO{
  fn: function
  a: 10
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

要印出 b ，所以找到
b ，值是 100

```
undefined
5
6
20
1
```

Terminal

```
global EC
global VO{
  fn: function
    a: 10
    b: 100
}
```



```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

印出 100

undefined 100
5
6
20
1
10

Terminal

```
global EC
global VO{
  fn: function
  a: 10
  b: 100
}
```

```
var a = 1
function fn(){
  console.log(a)
  var a = 5
  console.log(a)
  a++
  var a
  fn2()
  console.log(a)
  function fn2(){
    console.log(a)
    a = 20
    b = 100
  }
}
fn()
console.log(a)
a = 10
console.log(a)
console.log(b)
```

步驟解說

執行結束， global EC
VO 關閉



```
undefined    100
5
6
20
1
10
```

Terminal