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```

10
11 let person = {
12   |   nam: 'pc',
13 }
14
15 const members = [person];
16
17 person.nam = null;
18
19 console.log(members);
20

```

person

{ nam: 'pc' }

heap memory

members → arr

[ members[0], members[1], ... ]

members[0]

person

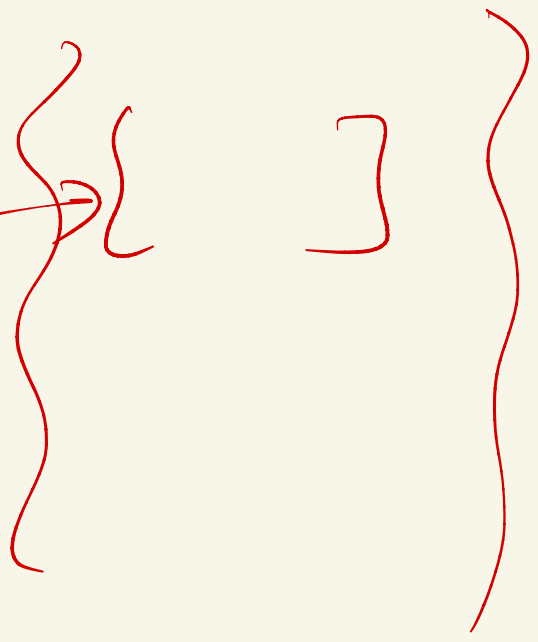
members → [ { nam: null } ]

~~{ nam: 'pc' }~~

{ nam: null }

Const members = { }

members



members

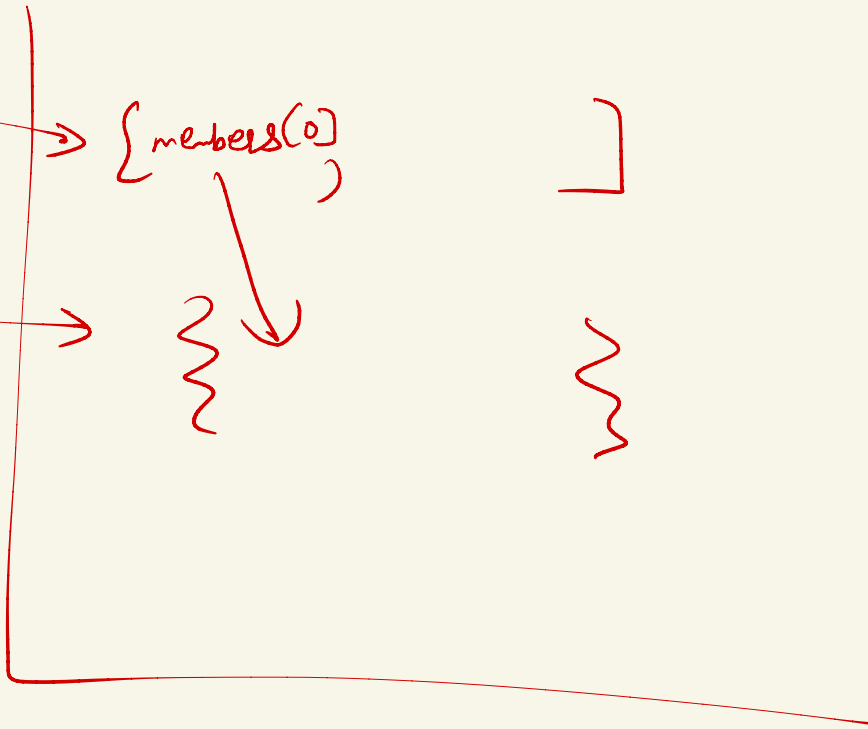
{members(0)

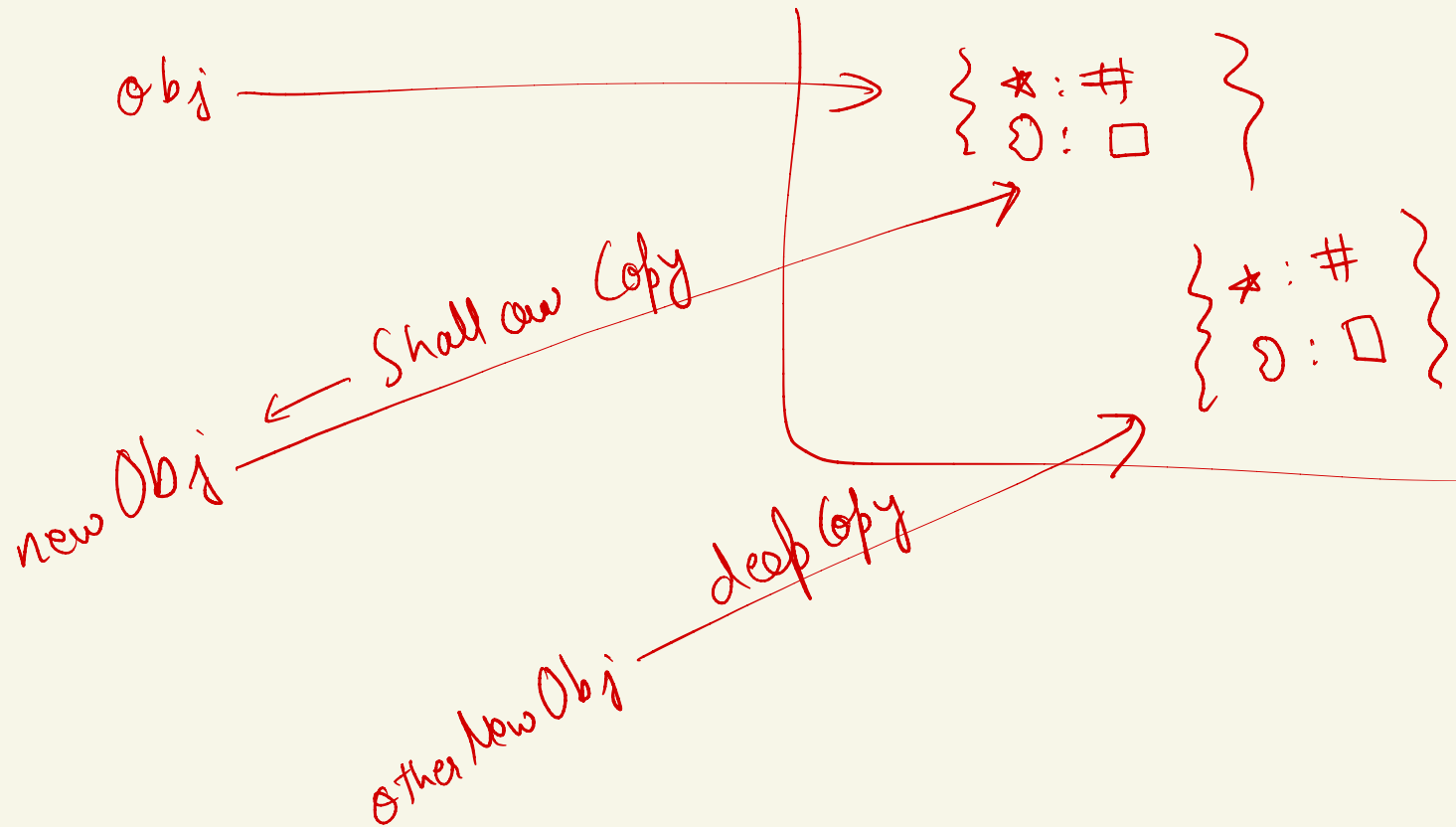
}

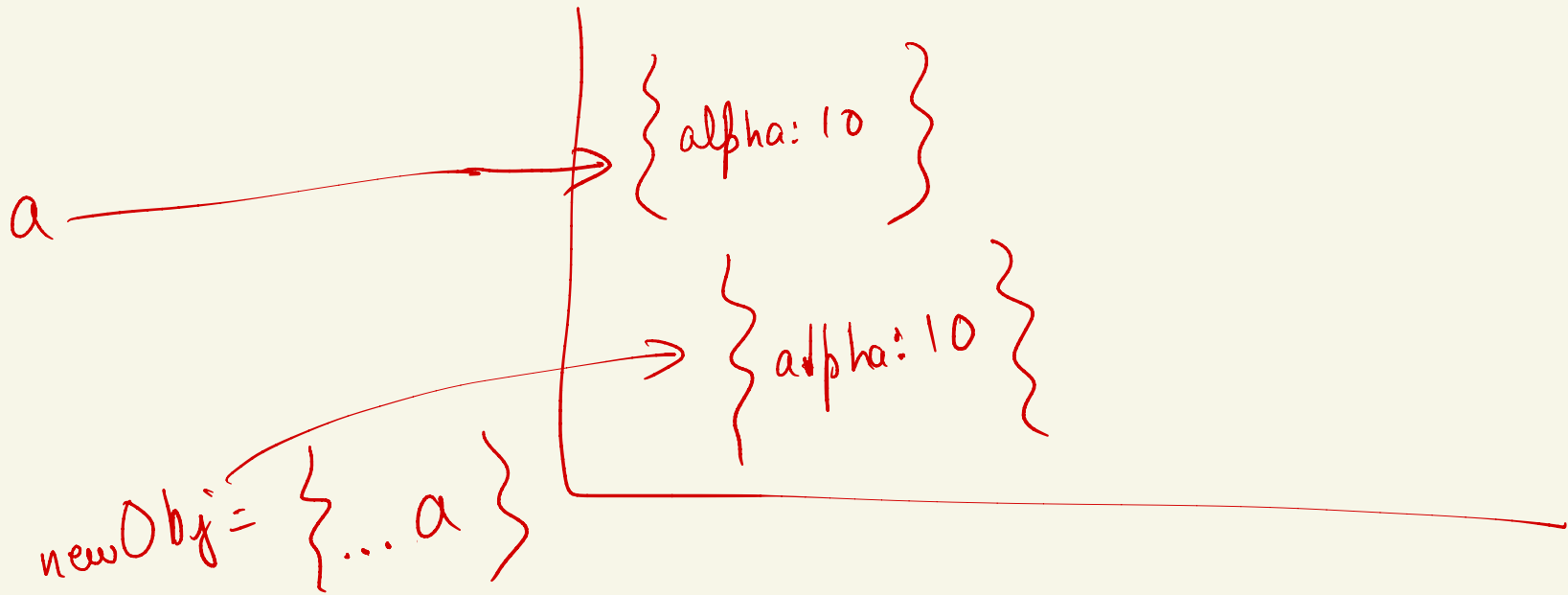
person

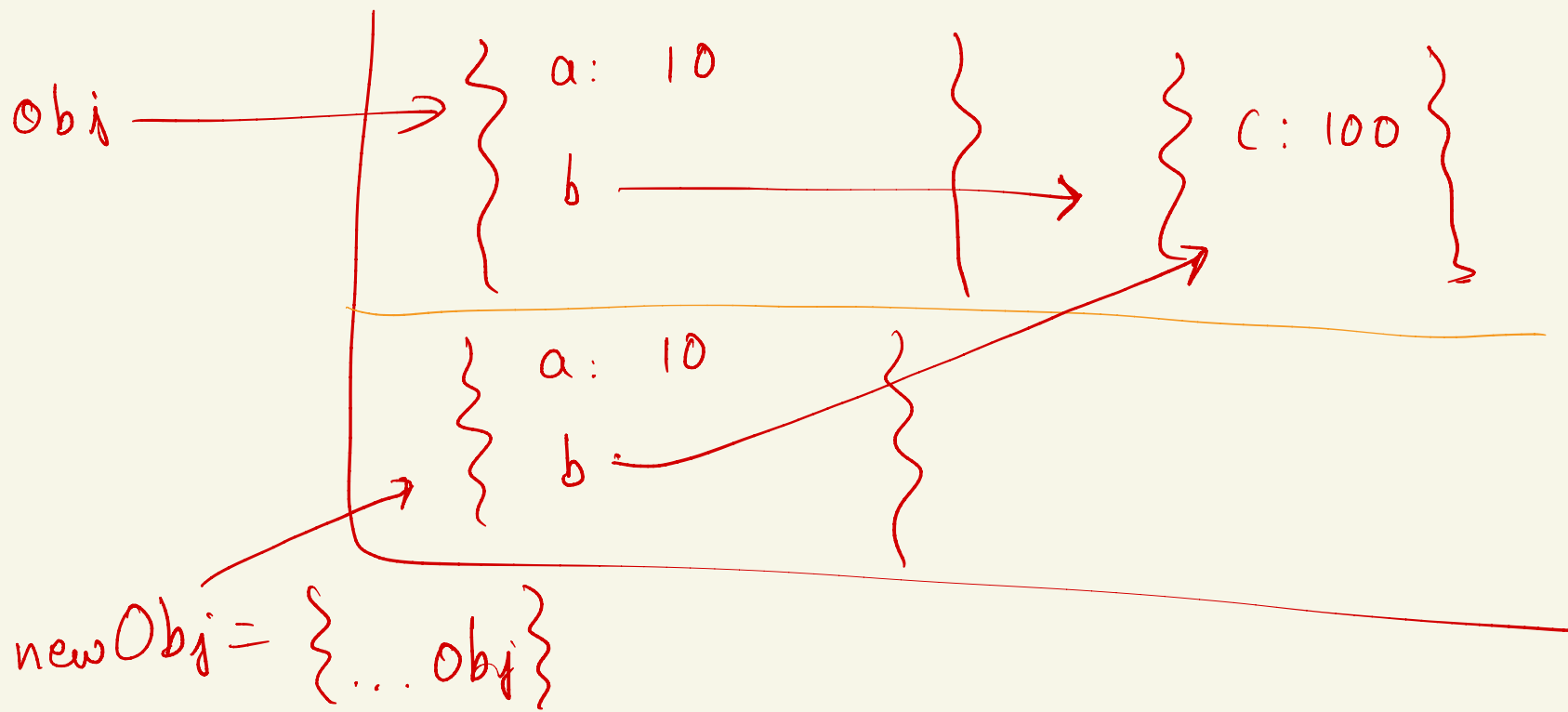
~  
~  
~

~  
~  
~









obj



$\left\{ \begin{array}{l} a: 10 \\ c: \{ b: 100 \} \end{array} \right\}$

objStr = "{ a: 10, c: { b: 100 } }"



```

35
36 let obj1 = {
37   a:10,
38   b:{
39     c:100,
40   }
41 }

```

```

5 const deepClone = (obj) => {
6   const type = typeof obj;
7   // i don't want to proceed with
8   // 'null', 'undefined' numbers & string
9   if (type !== 'object' || !obj) return obj;
10
11   // this is also array
12   let arrObj = Object.entries(obj);
13
14   // this is array
15   let deepCloneArrOfObj = arrObj.map(([key, value]) => [key, deepClone(value)]);
16
17   let finalObj = Object.fromEntries(deepCloneArrOfObj);
18   return finalObj;
19   // returning deepCloned version of obj
20 }

```

→  $arrObj = [ ['a', 10], ['b', \{c: 100\}] ] \Rightarrow [ ['a', 10], ['b', \{c: 100\}] ]$

$[ 'b', \{c: 100\} ] \rightarrow [ 'b', deepClone(\{c: 100\}) ]$

$\hookrightarrow [ 'c', 100 ] \rightarrow [ 'c', deepClone(100) ] \rightarrow [ 'c', 100 ]$

$\downarrow$   
 $\{ c: 100 \}$

$\downarrow$

$[ 'b', \{c: 100\} ]$

obj = { { a: 10 }, 'abc', 123 };

↓

⇒ [ deepClone({ a: 10 }), deepClone('abc'), deepClone(123) ]

↓

[ { a: 10 }, abc, 123 ]

←

$$\Rightarrow [a', 10] \Rightarrow [a', \text{deep}(\text{one}(10))]$$

↓

$$[a', 10]$$

↓

$$\{a; 10\}$$

