

V8 Memory usage

```
2  
3  
4  
5 class Employee {  
6   constructor(name, salary, sales) {  
7     this.name = name;  
8     this.salary = salary;  
9     this.sales = sales;  
10  }  
11  
12  const BONUS_PERCENTAGE = 10;  
13  
14  function getBonusPercentage(salary) {  
15    const percentage = (salary * BONUS_PERCENTAGE) / 100;  
16    return percentage;  
17  }  
18  
19  function findEmployeeBonus(salary, noOfSales) {  
20    const bonusPercentage = getBonusPercentage(salary);  
21    const bonus = bonusPercentage * noOfSales;  
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23  }  
24  
25  let john = new Employee("John", 5000, 5);  
26  john.bonus = findEmployeeBonus(john.salary, john.sales);  
27  console.log(john.bonus);  
28  
29  
30
```

Stack memory

Global frame

| | |
|--------------------|---|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |

Heap memory

Function

getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

Class

Employee {...}

V8 Memory usage

```
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4 class Employee {  
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Stack memory

Global frame

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|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |

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getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

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29 |  
30 |
```

Stack memory

Employee:new

| | |
|--------|--------|
| this | ● |
| name | "John" |
| salary | 5000 |
| sales | 5 |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |

Heap memory

Object

Function

getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

Class

Employee {...}

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Stack memory

Employee:new

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| this | ● |
| name | "John" |
| salary | 5000 |
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Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |

Heap memory

Object

| | |
|--------|-----------|
| name | "John" |
| salary | undefined |
| sales | undefined |
| bonus | undefined |

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getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

Class

Employee {...}

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Stack memory

Employee:new

| | |
|--------|--------|
| this | ● |
| name | "John" |
| salary | 5000 |
| sales | 5 |
| return | ● |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
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Heap memory

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Stack memory

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
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| BONUS_PERCENTAGE | 10 |
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Heap memory

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Employee {...}

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27 console.log(john.bonus);
28
29
30
```

Stack memory

findEmployeeBonus

| | |
|-----------------|-----------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | undefined |
| bonus | undefined |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |
| john | ● |

Heap memory

Object

| | |
|--------|-----------|
| name | "John" |
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getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

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Employee {...}

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29 |
30 |
```

Stack memory

getBonusPercentage

| | |
|------------|-----------|
| salary | 5000 |
| percentage | undefined |

findEmployeeBonus

| | |
|-----------------|-----------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | undefined |
| bonus | undefined |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |
| john | ● |

Heap memory

Object

| | |
|--------|-----------|
| name | "John" |
| salary | 5000 |
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30 |
```

Stack memory

getBonusPercentage

| | |
|------------|------|
| salary | 5000 |
| percentage | 500 |

findEmployeeBonus

| | |
|-----------------|-----------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | undefined |
| bonus | undefined |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
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Heap memory

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```

Stack memory

getBonusPercentage

| | |
|------------|------|
| salary | 5000 |
| percentage | 500 |
| return | 500 |

findEmployeeBonus

| | |
|-----------------|-----------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | undefined |
| bonus | undefined |

Global frame

| | |
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Global frame

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Heap memory

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```

Stack memory

findEmployeeBonus

| | |
|-----------------|------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | 500 |
| bonus | 2500 |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |
| john | ● |

Heap memory

Object

| | |
|--------|-----------|
| name | "John" |
| salary | 5000 |
| sales | 5 |
| bonus | undefined |

Function

getBonusPercentage(...) {...}

Function

findEmployeeBonus(...) {...}

Class

Employee {...}

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Stack memory

findEmployeeBonus

| | |
|-----------------|------|
| salary | 5000 |
| noOfSales | 5 |
| bonusPercentage | 500 |
| bonus | 2500 |
| return | 2500 |

Global frame

| | |
|--------------------|----|
| getBonusPercentage | ● |
| findEmployeeBonus | ● |
| Employee | ● |
| BONUS_PERCENTAGE | 10 |
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Heap memory

Object

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