



15 MIN

HOMework REVIEW

CORRECTION / DEMO

CHAPTER 1

PYTHON *to* JS

PART 3

OBJECTS

```
{ key: value, key: value }
```

Python dictionaries are *objects* in JavaScript

But more powerful !!





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An object is declared or dynamically created

Code declared

```
✓ let car = {  
  model: '570',  
  color: 'white',  
  brand: 'Toyota',  
};
```

Dynamically created

```
let person = {  
  name: 'rady',  
  age: 26  
};  
person['province'] = 'BMC';  
// or  
person.position = "Trainer";  
  
console.log(person);
```

Output

top Filter

```
▶ {name: "rady", age: 26, province: "BMC", position: "Trainer"}
```



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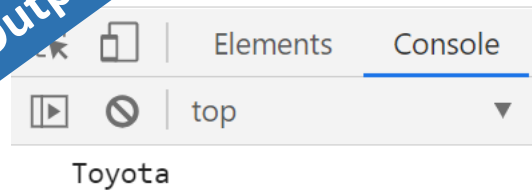
An object attributes can be accessed either Using [] or .

Access object attributes using []

```
let car = {  
  model: '570',  
  color: 'white',  
  brand: 'Toyota',  
};
```

```
console.log(car['brand']);
```

Output



Access object attributes using .

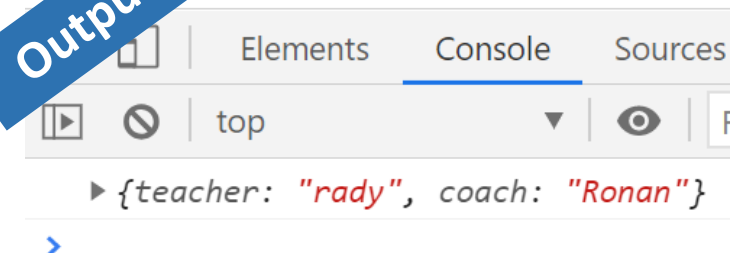
```
let car = {  
  model: '570',  
  color: 'white',  
  brand: 'Toyota',  
};  
  
console.log(car.brand);
```



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An object can be composed of other objects

```
let students = {  
  generation: {  
    year: 2021,  
    major: {  
      mobile: {  
        teacher: 'rady',  
        coach: 'Ronan'  
      },  
      web: {  
        teacher: 'Him',  
        coach: 'Clement'  
      }  
    },  
    school: 'PNC'  
  },  
}  
  
console.log(students.generation.major.mobile);
```

Output



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What this code will print ?

```
let teachers = {  
  name: 'rady',  
  age: 20,  
};  
  
teachers.position = "trainer";  
console.log(teachers);
```

- A. `▶ {name: "rady", age: 20, position: "trainer"}`

- B. `▶ {name: "rady", age: 20}`

- C. `▶ {name: "trainer", age: 20}`
- D. undefined



15 MIN

What this code will print ?

```
let teachers = {  
  name: 'ronan',  
  age: 20,  
};  
delete teachers.age;  
console.log(teachers);
```

- A. ▶ `{age: 20}`
- B. ▶ `{name: "ronan", age: 20}`
- C. ▶ `{name: "ronan"}`
- D. undefined



15 MIN

What this code will print ?

```
✓ let teachers = {  
    name: 'ronan',  
    age: 20,  
};  
console.log(teachers.name);
```

A.
ronan

B.
20

C.
name

D.
undefined



15 MIN

What this code will print ?

```
let teachers = {  
  name: 'ronan',  
  age: 20,  
};  
teachers.name = "rady";  
teachers.age = 26;  
console.log(teachers);
```

A.

► {name: "rady", age: 26}

B.

► {name: "ronan", age: 20}

C.

► {name: "ronan"}

D.

undefined



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2 ways to declare a function

Normal function

```
// Declaration
function sum(para1, para2) {
  |   return para1 + para2;
}
```

```
// Call
let result = sum(10, 30);
console.log(result);
```

Arrow function

```
// Declaration
✓ let sum = (para1, para2) => {
  |   return para1 + para2;
}
```

```
// Call
let result = sum(100, 300);
console.log(result);
```



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What this code will print ?

```
let compute = (array) => {  
  let sum = 0;  
  let x = 0;  
  for (let value of array) {  
    sum += value;  
  }  
  x = sum / array.length;  
  return x;  
}
```

```
let arr = [10, 5, 3];  
let result = compute(arr);  
console.log(result);
```

A.
5

B.
7.75

C.
6

D.
undefined



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What this code will print ?

```
✓ let square = (n) => {  
  |   return n * n;  
  }  
  
let arr = [1, 2, 3, 4];  
  
✓ for (let i in arr) {  
  |   arr[i] = square(arr[i]);  
  }  
  console.log(arr);
```

A.
[1, 4, 9, 16]

B.
[2, 4, 6, 8]

C.
[1, 2, 3, 4]

D.
undefined



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What this code will print ?

```
let square = (n) => {  
  return n - 1;  
}  
  
let arr = [1, 2, 3, 4];  
  
for (let i in arr) {  
  arr[i] = square(arr[i]) * square(arr[i]);  
}  
console.log(arr);
```

A.
[0, 1, 2, 3]

B.
[2, 4, 6, 8]

C.
[0, 1, 4, 9]

D.
undefined



15 MIN

What this code will print ?

```
let students = {  
  name: 'bora',  
  age: 18,  
  province: 'PHNOM PENH'  
}  
console.log(students['name']);
```

- | | | | |
|------|----|------------|-----------|
| A. | B. | C. | D. |
| bora | 18 | PHNOM PENH | undefined |



15 MIN

What this code will print ?

```
let students = [  
  { name: 'bora', age: 18, province: 'PHNOM PENH' },  
  { name: 'dara', age: 25, province: 'SIEM REAP' },  
  { name: 'romdul', age: 40, province: 'KAMPONG CHNANG' },  
];  
console.log(students[1]['age']);
```

- | | | | |
|----|----|----|-----------|
| A. | B. | C. | D. |
| 25 | 18 | 40 | undefined |



15 MIN

What this code will print ?

```
let students = [  
  { name: 'bora', age: 18, province: 'PHNOM PENH' },  
  { name: 'dara', age: 25, province: 'SIEM REAP' },  
  { name: 'romdul', age: 40, province: 'KAMPONG CHNANG' },  
];  
console.log(students[1]['provinces']);
```

A.

25

B.

18

C.

40

D.

undefined



15 MIN

What this code will print ?

```
let students = [  
  { name: 'bora', age: 18, province: 'PHNOM PENH' },  
  { name: 'dara', age: 25, province: 'SIEM REAP' },  
  { name: 'romdul', age: 40, province: 'KAMPONG CHNANG' },  
];  
let x = students[0]['age'];  
for (let student of students) {  
  if (x > student['age']) {  
    x = student['age'];  
  }  
}  
console.log(x);
```

A.
25

B.
18

C.
40

D.
undefined



15 MIN

What this code will print ?

```
let students = [
  { name: 'bora', age: 18, province: 'PHNOM PENH' },
  { name: 'dara', age: 25, province: 'SIEM REAP' },
  { name: 'romdul', age: 40, province: 'KAMPONG CHNANG' },
];
let x = students[0]['age'];
let y = "";
for (let student of students) {
  if (x < student['age']) {
    x = student['age'];
  }
}
for (let student of students) {
  if (x == student['age']) {
    y = student['name'];
  }
}
console.log(y.toUpperCase());
```

- | | | | |
|------|--------|------|-----------|
| A. | B. | C. | D. |
| DARA | ROMDUL | bora | undefined |

EXERCICE

 30 MIN

Read the instructions
Submit your `script.js`