

```
const name = "Mary Doe";  
console.log(name.toUpperCase());  
console.log(name.toLowerCase());  
/*
```

Everything in JavaScript is an object. Objects are variables that stores more than one value in a single variable name. It comes in a key/value pair way. Object could represent a real life thing. e.g car, human, animal etc

There are three ways of using objects

1. Object Literal
2. new keyword
3. Object Constructor

```
*/
```

```
// Th object literal
```

```
const car = {  
  model: "Kia",  
  year: 2024,  
  color: "red",  
};  
console.log(car);  
console.log(car["model"]);  
console.log(car.model);  
car.model = "Toyota";  
console.log(car);  
car["tyres"] = 12;  
console.log(car);
```

```
// deleting a key/value
delete car.tyres;
console.log(car);

// Using the new keyword
const person = new Object();
console.log(person);
person.name = "Peter Doe";
person.email = "peterdoe@gmail.com";
person.age = 19;
console.log(person);

// Using Object constructor: a constructor is a function that is called(instantiated) when a
new

// object is being created from a class
function Animal(name, legs, weight) {
  this.name = name;
  this.legs = legs;
  this.weight = weight;
  this.details = function () {
    return `A ${this.name} has ${this.legs} legs and ${this.weight}kg average weight`;
  };
}

const cat = new Animal("Cat", 4, 5.5);
console.log(cat.legs);
console.log(cat.name);
console.log(cat.weight);
```

```
console.log(cat.details());
```

```
const dog = new Animal("Dog", 4, 50);
```

```
console.log(dog.details());
```

```
function Car(model, year, color) {
```

```
  // Object properties
```

```
  this.model = model;
```

```
  this.year = year;
```

```
  this.color = color;
```

```
  // Object methods
```

```
  this.sound = function (n) {
```

```
    return `A ${this.model} makes a ${n} sound`;
```

```
  };
```

```
  this.speed = function (a) {
```

```
    return `A ${this.model} makes ${a}KM/HR`;
```

```
  };
```

```
  this.details = function () {
```

```
    return `A ${this.color} ${this.model} made in ${this.year}`;
```

```
  };
```

```
}
```

```
const honda = new Car("Honda", 2025, "black");
```

```
console.log(honda.sound("Voooooooo!"));
```

```
console.log(honda.speed(200));
```

```
console.log(honda.details());
```

```
// Object Literal with a method(a function)
```

```
const student = {
  name: "Emeka Ade",
  email: "emekaade@gmail.com",
  age: 16,
  details: function () {
    return `My name is ${this.name}, I am ${this.age} years old. Send me an email
      on ${this.email}`;
  },
};

console.log(student.details());

const info = function () {
  return `I am Mr. ${this.name}, your new ${this.subject} teacher`;
};

const teacher = {
  name: "John Doe",
  email: "johndoe@gmail.com",
  subject: "Physics",
  info: info,
};

console.log(teacher.info());

// Transactional case of object constructor

function Account(name, accNumber, balance = 0) {
  this.name = name;
  this.accNumber = accNumber;
  this.balance = balance;
}
```

```
this.balanceEnquiry = function () {  
    return this.balance;  
};  
  
this.deposit = function (amount) {  
    this.balance += amount;  
    return `${amount} has been credited into your account`;  
};  
  
this.withdraw = function (amount) {  
    if (this.balance - amount < 1000) {  
        return "Insufficient funds";  
    } else {  
        this.balance -= amount;  
        return `${amount} withdrawn successfully!`;  
    }  
};  
}
```

```
const ike = new Account("Ike Emmanuel", "#00001");  
console.log(ike.balanceEnquiry());  
console.log(ike.deposit(5000));  
console.log(ike.balanceEnquiry());  
console.log(ike.withdraw(4500));  
console.log(ike.balanceEnquiry());
```

```
const olumide = new Account("Olumide Ajayi", "#00002", 10000);  
console.log(olumide.balanceEnquiry());
```

