Call, Apply and Bind attach **this** into the function.

Bind:

- Use bind when you want the function set this.value now and execute function later.
- It is useful in events.

```
1    var person1 = {firstName: 'Gaurav', lastName: 'Walia'};
2    var person2 = {firstName: 'Niharika', lastName: 'Bhalla'};
3
4    function say(greeting) {
5        console.log(greeting + ' ' + this.firstName + ' ' + this.lastName);
6    }
7
8    var sayHelloGaurav = say.bind(person1);
9    var sayHelloNiharika = say.bind(person2);
10
11   sayHelloGaurav(); // Hello Gaurav Walia
12   sayHelloNiharika(); // Hello Niharika Bhalla
13
```

Call:

- Use call when you want to invoke the function immediately.
- It allows to pass arguments one by one as parenthesis.

```
1    var person1 = {firstName: 'Gaurav', lastName: 'Walia'};
2    var person2 = {firstName: 'Niharika', lastName: 'Bhalla'};
3
4    function say(greeting) {
5        console.log(greeting + ' ' + this.firstName + ' ' + this.lastName);
6    }
7
8    say.call(person1, 'Hello'); // Hello Gaurav Walia
9    say.call(person2, 'Hello'); // Hello Niharika Bhalla
```

Apply:

- Like call, use call when you want to invoke the function immediately.
- It allows to pass arguments as array as parenthesis.

```
1   var person1 = {firstName: 'Gaurav', lastName: 'Walia'};
2   var person2 = {firstName: 'Niharika', lastName: 'Bhalla'};
3
4   function say(greeting) {
5       console.log(greeting + ' ' + this.firstName + ' ' + this.lastName);
6   }
7
8   say.apply(person1, ['Hello']); // Hello Gaurav Walia
9   say.apply(person2, ['Hello']); // Hello Niharika Bhalla
10
11
12
```

When To Use Each:

- Call and apply are pretty interchangeable. Just decide whether it's easier to send in an array or a comma separated list of arguments.
- Remember which one is which by remembering that Call is for comma (separated list) and Apply is for Array.
- Bind is a bit different. It returns a new function. Call and Apply execute the current function immediately.
- Bind is used for events like onClick where we don't know when they'll be fired but we know what context we want them to have.