await

The `await` operator is used to wait for a `Promise`. It can only be used inside an `async function`.

Syntax

```
[rv] = await expression;
```

expression
A `Promise` or any value to wait for.

rv
Returns the fulfilled value of the promise, or the value itself if it's not a `Promise`.

Description

The `await` expression causes `async` function execution to pause until a `Promise` is fulfilled or rejected, and to resume execution of the `async` function after fulfillment. When resumed, the value of the `await` expression is that of the fulfilled `Promise`.

If the `Promise` is rejected, the `await` expression throws the rejected value.

If the value of the *expression* following the `await` operator is not a `Promise`, it's converted to a resolved Promise.

Examples

If a `Promise` is passed to an `await` expression, it waits for the `Promise` to be fulfilled and returns the fulfilled value.

```
1  function resolveAfter2Seconds(x) {
2    return new Promise(resolve => {
3      setTimeout(() => {
4        resolve(x);
5      }, 2000);
```

```
 6      });
 7    }
 8
 9    async function f1() {
10      var x = await resolveAfter2Seconds(10);
11      console.log(x); // 10
12    }
13    f1();
```

If the value is not a `Promise`, it converts the value to a resolved `Promise`, and waits for it.

```
1    async function f2() {
2      var y = await 20;
3      console.log(y); // 20
4    }
5    f2();
```

If the `Promise` is rejected, the rejected value is thrown.

```
1    async function f3() {
2      try {
3        var z = await Promise.reject(30);
4      } catch(e) {
5        console.log(e); // 30
6      }
7    }
8    f3();
```

Specifications

Specification	Status	Comment
↗ ECMAScript Latest Draft (ECMA-262) The definition of 'async functions' in that specification.	LS Living Standard	Initial definition in ES2017.

Browser compatibility

Feature	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari
Basic Support	55	(Yes)	52	?	42	10.1

Desktop   Mobile

See also

- `async function`
- `async function expression`
- `AsyncFunction` object

Feature	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari
Basic Support	55	(Yes)	52	?	42	10.1