This example shows the automatically created async commons chunks.

The example entry references two chunks:

```
• entry chunk
```

- o async require -> chunk X
- o async require -> chunk Y
- chunk X
  - o module a
  - module b
  - o module c
- chunk Y
  - o module a
  - module b
  - o module d

These chunks share modules a and b. The optimization extract these into chunk Z:

Note: The optimization compares the size of chunk Z to some minimum value, but this is disabled from this example. In practice, there is no configuration needed for this.

- entry chunk
  - o async require -> chunk X & Z
  - o async require -> chunk Y & Z
- chunk X
  - module c
- chunk Y
  - module d
- chunk Z
  - o module a
  - o module b

Pretty useful for a router in a SPA.

## example.js

```
// a chunks with a, b, c
require(["./a", "./b", "./c"]);

// a chunk with a, b, d
require.ensure(["./a"], function(require) {
    require("./b");
    require("./d");
});
```

## dist/output.js

▶ /\* webpack runtime code \*/

```
var __webpack_exports__ = {};
 !*** ./example.js ***!
 \*********
/*! unknown exports (runtime-defined) */
/*! runtime requirements: __webpack_require__, __webpack_require__.e,
__webpack_require__.oe, __webpack_require__.* */
// a chunks with a, b, c
Promise.all(/*! AMD require */[__webpack_require__.e(394),
__webpack_require__.e(460)]).then(function() {[__webpack_require__(/*! ./a */ 1),
__webpack_require__(/*! ./b */ 2), __webpack_require__(/*! ./c */
3)];}).catch( webpack require .oe);
// a chunk with a, b, d
Promise.all(/*! require.ensure */[ webpack require .e(394),
__webpack_require__.e(767)]).then((function(require) {
   __webpack_require__(/*! ./b */ 2);
    __webpack_require__(/*! ./d */ 4);
}).bind(null, webpack require )).catch( webpack require .oe);
/*****/ }) ()
```

## dist/394.output.js

```
(self["webpackChunk"] = self["webpackChunk"] || []).push([[394],[
/* 0 */,
/* 1 */
/*!***********!*\
 !*** ./a.js ***!
 \**********
/*! unknown exports (runtime-defined) */
/*! runtime requirements: module */
/*! CommonJS bailout: module.exports is used directly at 1:0-14 */
/***/ ((module) => {
module.exports = "a";
/***/ }),
/* 2 */
/*!************!*\
 !*** ./b.js ***!
 \***********
```

```
/*! unknown exports (runtime-defined) */
/*! runtime requirements: module */
/*! CommonJS bailout: module.exports is used directly at 1:0-14 */
/***/ ((module) => {

module.exports = "b";

/***/ })
]]);
```

## dist/460.output.js

# dist/767.output.js

### Info

### Unoptimized

```
asset output.js 9.18 KiB [emitted] (name: main)
asset 394.output.js 610 bytes [emitted]
asset 460.output.js 338 bytes [emitted]
asset 767.output.js 338 bytes [emitted]
chunk (runtime: main) output.js (main) 164 bytes (javascript) 4.98 KiB (runtime)
[entry] [rendered]
  > ./example.js main
 runtime modules 4.98 KiB 6 modules
  ./example.js 164 bytes [built] [code generated]
    [used exports unknown]
    entry ./example.js main
chunk (runtime: main) 394.output.js 42 bytes [rendered] split chunk (cache group:
default)
  > ./a ./b ./c ./example.js 2:0-30
  > ./example.js 5:0-8:2
  ./a.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./a.js 1:0-14
   amd require ./a ./example.js 2:0-30
   require.ensure item ./a ./example.js 5:0-8:2
  ./b.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./b.js 1:0-14
   amd require ./b ./example.js 2:0-30
    cjs require ./b ./example.js 6:1-15
chunk (runtime: main) 460.output.js 21 bytes [rendered]
  > ./a ./b ./c ./example.js 2:0-30
  ./c.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./c.js 1:0-14
    amd require ./c ./example.js 2:0-30
chunk (runtime: main) 767.output.js 21 bytes [rendered]
  > ./example.js 5:0-8:2
  ./d.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./d.js 1:0-14
   cjs require ./d ./example.js 7:1-15
webpack 5.51.1 compiled successfully
```

#### **Production mode**

```
asset output.js 1.81 KiB [emitted] [minimized] (name: main)
asset 394.output.js 104 bytes [emitted] [minimized]
asset 460.output.js 81 bytes [emitted] [minimized]
```

```
asset 767.output.js 81 bytes [emitted] [minimized]
chunk (runtime: main) output.js (main) 164 bytes (javascript) 4.98 KiB (runtime)
[entry] [rendered]
 > ./example.js main
 runtime modules 4.98 KiB 6 modules
  ./example.js 164 bytes [built] [code generated]
   [no exports used]
   entry ./example.js main
chunk (runtime: main) 394.output.js 42 bytes [rendered] split chunk (cache group:
default)
  > ./a ./b ./c ./example.js 2:0-30
  > ./example.js 5:0-8:2
  ./a.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./a.js 1:0-14
   amd require ./a ./example.js 2:0-30
   require.ensure item ./a ./example.js 5:0-8:2
  ./b.js 21 bytes [built] [code generated]
   [used exports unknown]
   cjs self exports reference ./b.js 1:0-14
   amd require ./b ./example.js 2:0-30
   cjs require ./b ./example.js 6:1-15
chunk (runtime: main) 460.output.js 21 bytes [rendered]
  > ./a ./b ./c ./example.js 2:0-30
  ./c.js 21 bytes [built] [code generated]
   [used exports unknown]
   cjs self exports reference ./c.js 1:0-14
    amd require ./c ./example.js 2:0-30
chunk (runtime: main) 767.output.js 21 bytes [rendered]
 > ./example.js 5:0-8:2
  ./d.js 21 bytes [built] [code generated]
    [used exports unknown]
   cjs self exports reference ./d.js 1:0-14
   cjs require ./d ./example.js 7:1-15
webpack 5.51.1 compiled successfully
```