

## example.js

```
import { get, set, getNumber } from "./magic.js";

// accessing memory
console.log(get());
set(42);
console.log(get());
set(123);
console.log(get());

// random numbers
console.log(getNumber());
console.log(getNumber());
console.log(getNumber());
```

## magic.js

```
// reexporting
export * from "./magic.wat";
```

## magic.wat

```
(module
  (type $t0 (func (result i32)))
  (type $t1 (func (param i32)))
  (import "./memory.js" "memory" (memory 1))
  (import "./magic-number.js" "getRandomNumber" (func $getRandomNumber (type $t0)))
  (func $get (export "get") (type $t0) (result i32)
    (i32.load
      (i32.const 0)))
  (func $set (export "set") (type $t1) (param $p i32)
    (i32.store
      (i32.const 0)
      (get_local $p)))
  (func $get (export "getNumber") (type $t0) (result i32)
    (call $getRandomNumber))
)
```

## magic-number.js

```
export function getNumber() {
  return 42;
}
```

```
export function getRandomNumber() {
  return Math.floor(Math.random() * 256);
}
```

## memory.js

```
async function getMemoryFromParentInWorker() {
  await new Promise(r => setTimeout(r, 200));
  // fake
  return new WebAssembly.Memory({ initial: 1 });
}
```

```
export const memory = await getMemoryFromParentInWorker();
```

## dist/output.js

```

/*****/ (() => { // webpackBootstrap
/*****/   "use strict";
/*****/   var __webpack_modules__ = ([
/* 0 */
/*!*****!\
  *** ./example.js ***!
  \*****/
/*! namespace exports */
/*! exports [not provided] [no usage info] */
/*! runtime requirements: __webpack_require__, __webpack_require__.r, __webpack_exports__, r
*****/ ((module, __webpack_exports__, __webpack_require__) => {

  __webpack_require__.a(module, async (__webpack_handle_async_dependencies__) => {
    __webpack_require__.r(__webpack_exports__);
    /* harmony import */ var _magic_js__WEBPACK_IMPORTED_MODULE_0__ = __webpack_require__(/*! .
    var __webpack_async_dependencies__ = __webpack_handle_async_dependencies__([_magic_js__WEBPA
    _magic_js__WEBPACK_IMPORTED_MODULE_0__ = (__webpack_async_dependencies__.then ? await __webp

    // accessing memory
    console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0__.get)());
    (0,_magic_js__WEBPACK_IMPORTED_MODULE_0__.set)(42);
    console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0__.get)());
    (0,_magic_js__WEBPACK_IMPORTED_MODULE_0__.set)(123);
    console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0__.get)());

    // random numbers

```

```

console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0___.getNumber)());
console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0___.getNumber)());
console.log((0,_magic_js__WEBPACK_IMPORTED_MODULE_0___.getNumber)());

});

/***/ }),
/* 1 */
/*!*****!\
    *** ./magic.js ***!
    \******/
    /*! namespace exports */
    /*! export get [provided] [no usage info] [missing usage info prevents renaming] -> ./magic.js */
    /*! export getNumber [provided] [no usage info] [missing usage info prevents renaming] -> ./magic.js */
    /*! export set [provided] [no usage info] [missing usage info prevents renaming] -> ./magic.js */
    /*! other exports [not provided] [no usage info] */
    /*! runtime requirements: __webpack_require__, __webpack_exports__, __webpack_require__.d, __webpack_require__.p */
    /***/ ((module, __webpack_exports__, __webpack_require__) => {

    __webpack_require__.a(module, async (__webpack_handle_async_dependencies__) => {
    __webpack_require__.r(__webpack_exports__);
    /* harmony export */ __webpack_require__.d(__webpack_exports__, {
    /* harmony export */   "get": () => (/* reexport safe */ _magic_wat__WEBPACK_IMPORTED_MODULE_0___default()) /* harmony export */   "getNumber": () => (/* reexport safe */ _magic_wat__WEBPACK_IMPORTED_MODULE_0___default().getNumber) /* harmony export */   "set": () => (/* reexport safe */ _magic_wat__WEBPACK_IMPORTED_MODULE_0___default().set) /* harmony export */ });
    /* harmony import */ var _magic_wat__WEBPACK_IMPORTED_MODULE_0__ = __webpack_require__(/*!
var __webpack_async_dependencies__ = __webpack_handle_async_dependencies__([_magic_wat__WEBPACK_IMPORTED_MODULE_0__], __webpack_exports__, __webpack_require__);
_magic_wat__WEBPACK_IMPORTED_MODULE_0__ = (__webpack_async_dependencies__.then ? await __webpack_async_dependencies__ : __webpack_async_dependencies__);
    // reexporting

    });

    /***/ }),
/* 2 */
/*!*****!\
    *** ./magic.wat ***!
    \******/
    /*! namespace exports */
    /*! export get [provided] [no usage info] [provision prevents renaming (no use info)] */
    /*! export getNumber [provided] [no usage info] [provision prevents renaming (no use info)] */
    /*! export set [provided] [no usage info] [provision prevents renaming (no use info)] */
    /*! other exports [not provided] [no usage info] */
    /*! runtime requirements: module, module.id, __webpack_exports__, __webpack_require__.v, __webpack_require__.p */
    /***/ ((module, exports, __webpack_require__) => {

```

```

var __webpack_instantiate__ = ([WEBPACK_IMPORTED_MODULE_0]) => {
  return __webpack_require__.v(exports, module.id, "daa529a2a650ee3943a9", {
    "./memory.js": {
      "memory": WEBPACK_IMPORTED_MODULE_0.memory
    },
    "./magic-number.js": {
      "getRandomNumber": WEBPACK_IMPORTED_MODULE_1.getRandomNumber
    }
  });
}

__webpack_require__.a(module, (__webpack_handle_async_dependencies__) => {
  /* harmony import */ var WEBPACK_IMPORTED_MODULE_0 = __webpack_require__(/*! ./memory.js */);
  /* harmony import */ var WEBPACK_IMPORTED_MODULE_1 = __webpack_require__(/*! ./magic-number.js */);
  var __webpack_async_dependencies__ = __webpack_handle_async_dependencies__([WEBPACK_IMPORTED_MODULE_0, WEBPACK_IMPORTED_MODULE_1]);
  return __webpack_async_dependencies__.then ? __webpack_async_dependencies__.then(__webpack_require__, 1);

  /**/ })),
  /* 3 */
  /**/*****!*\
  !*** ./memory.js ***!
  \*****/
  /**/ namespace exports */
  /**/ export memory [provided] [no usage info] [missing usage info prevents renaming] */
  /**/ other exports [not provided] [no usage info] */
  /**/ runtime requirements: __webpack_require__.r, __webpack_exports__, module, __webpack_require__
  /**/ ((module, __webpack_exports__, __webpack_require__) => {

    __webpack_require__.a(module, async (__webpack_handle_async_dependencies__) => {
      __webpack_require__.r(__webpack_exports__);
      /* harmony export */ __webpack_require__.d(__webpack_exports__, {
        /* harmony export */ "memory": () => (/* binding */ memory)
      });
      /* harmony export */ });
      async function getMemoryFromParentInWorker() {
        await new Promise(r => setTimeout(r, 200));
        // fake
        return new WebAssembly.Memory({ initial: 1 });
      }

      const memory = await getMemoryFromParentInWorker();

      __webpack_handle_async_dependencies__();
    }, 1);

    /**/ })),

```

```

/* 4 */
/*!*****!\
  *** ./magic-number.js ***!
  \******/
/*! namespace exports */
/*! export getNumber [provided] [no usage info] [missing usage info prevents renaming] */
/*! export getRandomNumber [provided] [no usage info] [missing usage info prevents renaming] */
/*! other exports [not provided] [no usage info] */
/*! runtime requirements: __webpack_require__.r, __webpack_exports__, __webpack_require__.d.
****/ ((__unused_webpack_module, __webpack_exports__, __webpack_require__) => {

  __webpack_require__.r(__webpack_exports__);
  /* harmony export */ __webpack_require__.d(__webpack_exports__, {
  /* harmony export */   "getNumber": () => (/* binding */ getNumber),
  /* harmony export */   "getRandomNumber": () => (/* binding */ getRandomNumber)
  /* harmony export */ });
  function getNumber() {
    return 42;
  }

  function getRandomNumber() {
    return Math.floor(Math.random() * 256);
  }

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

/* webpack runtime code */

/*****
*****/   // The module cache
*****/   var __webpack_module_cache__ = {};
*****/
*****/   // The require function
*****/   function __webpack_require__(moduleId) {
*****/     // Check if module is in cache
*****/     var cachedModule = __webpack_module_cache__[moduleId];
*****/     if (cachedModule !== undefined) {
*****/       return cachedModule.exports;
*****/     }
*****/     // Create a new module (and put it into the cache)
*****/     var module = __webpack_module_cache__[moduleId] = {
*****/       id: moduleId,
*****/       // no module.loaded needed
*****/       exports: {}
*****/     };

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/*****/
/*****/      // Execute the module function
/*****/      __webpack_modules__[moduleId](module, module.exports, __webpack_require__);
/*****/
/*****/      // Return the exports of the module
/*****/      return module.exports;
/*****/    }
/*****/
/*****/
/*****/      /* webpack/runtime/async module */
/*****/      (() => {
/*****/        var webpackThen = typeof Symbol === "function" ? Symbol("webpack then") : "
/*****/        var webpackExports = typeof Symbol === "function" ? Symbol("webpack exports
/*****/        var completeQueue = (queue) => {
/*****/          if(queue) {
/*****/            queue.forEach((fn) => (fn.r--));
/*****/            queue.forEach((fn) => (fn.r-- ? fn.r++ : fn()));
/*****/          }
/*****/        }
/*****/        var completeFunction = (fn) => (!--fn.r && fn());
/*****/        var queueFunction = (queue, fn) => (queue ? queue.push(fn) : completeFunction);
/*****/        var wrapDeps = (deps) => (deps.map((dep) => {
/*****/          if(dep !== null && typeof dep === "object") {
/*****/            if(dep[webpackThen]) return dep;
/*****/            if(dep.then) {
/*****/              var queue = [];
/*****/              dep.then((r) => {
/*****/                obj[webpackExports] = r;
/*****/                completeQueue(queue);
/*****/                queue = 0;
/*****/              });
/*****/              var obj = {};
/*****/              obj[webpackThen] = (fn, reject) =>
/*****/                return obj;
/*****/            }
/*****/          }
/*****/          var ret = {};
/*****/          ret[webpackThen] = (fn) => (completeFunction(fn));
/*****/          ret[webpackExports] = dep;
/*****/          return ret;
/*****/        }));
/*****/        __webpack_require__.a = (module, body, hasAwait) => {
/*****/          var queue = hasAwait && [];
/*****/          var exports = module.exports;
/*****/          var currentDeps;
/*****/          var outerResolve;

```

```

/***/
var reject;
/***/
var isEvaluating = true;
/***/
var nested = false;
/***/
var whenAll = (deps, onResolve, onReject) => {
  if (nested) return;
  nested = true;
  onResolve.r += deps.length;
  deps.map((dep, i) => (dep[webpackThen](onResolve, onReject)));
  nested = false;
};
/***/
var promise = new Promise((resolve, rej) => {
  reject = rej;
  outerResolve = () => (resolve(exports), completeQueue(queue), queue);
});
promise[webpackExports] = exports;
promise[webpackThen] = (fn, rejectFn) => {
  if (isEvaluating) { return completeFunction(fn); }
  if (currentDeps) whenAll(currentDeps, fn, rejectFn);
  queueFunction(queue, fn);
  promise.catch(rejectFn);
};
module.exports = promise;
body((deps) => {
  if(!deps) return outerResolve();
  currentDeps = wrapDeps(deps);
  var fn, result;
  var promise = new Promise((resolve, reject) => {
    fn = () => (resolve(result = currentDeps.map((d) => (d[webpackE
    fn.r = 0;
    whenAll(currentDeps, fn, reject));
  });
  return fn.r ? promise : result;
}).then(outerResolve, reject);
isEvaluating = false;
});
})();
/***/
/* webpack/runtime/define property getters */
(() => {
  // define getter functions for harmony exports
  __webpack_require__.d = (exports, definition) => {
    for(var key in definition) {
      if(__webpack_require__.o(definition, key) && !__webpack_require__.o
        Object.defineProperty(exports, key, { enumerable: true, get: de
    }
  }
}

```

```

/*****/      };
/*****/      })();
/*****/
/*****/      /* webpack/runtime/hasOwnProperty shorthand */
/*****/      (() => {
/*****/          __webpack_require__.o = (obj, prop) => (Object.prototype.hasOwnProperty.call
/*****/      })();
/*****/
/*****/      /* webpack/runtime/make namespace object */
/*****/      (() => {
/*****/          // define __esModule on exports
/*****/          __webpack_require__.r = (exports) => {
/*****/              if(typeof Symbol !== 'undefined' && Symbol.toStringTag) {
/*****/                  Object.defineProperty(exports, Symbol.toStringTag, { value: 'Module
/*****/              }
/*****/              Object.defineProperty(exports, '__esModule', { value: true });
/*****/          };
/*****/      })();
/*****/
/*****/      /* webpack/runtime/wasm loading */
/*****/      (() => {
/*****/          __webpack_require__.v = (exports, wasmModuleId, wasmModuleHash, importsObj)
/*****/          var req = fetch(__webpack_require__.p + "" + wasmModuleHash + ".module.
/*****/          if (typeof WebAssembly.instantiateStreaming === 'function') {
/*****/              return WebAssembly.instantiateStreaming(req, importsObj)
/*****/                  .then((res) => (Object.assign(exports, res.instance.exports)));
/*****/          }
/*****/          return req
/*****/              .then((x) => (x.arrayBuffer()))
/*****/              .then((bytes) => (WebAssembly.instantiate(bytes, importsObj)))
/*****/              .then((res) => (Object.assign(exports, res.instance.exports)));
/*****/      };
/*****/      })();
/*****/
/*****/      /* webpack/runtime/publicPath */
/*****/      (() => {
/*****/          __webpack_require__.p = "dist/";
/*****/      })();
/*****/
/*****/      /*****/
/*****/      // startup
/*****/      // Load entry module and return exports
/*****/      // This entry module used 'module' so it can't be inlined
/*****/      var __webpack_exports__ = __webpack_require__(0);

```



```

/*****/
/*****/ })()
;

```

## Info

### Unoptimized

```

asset output.js 12.8 KiB [emitted] (name: main)
asset daa529a2a650ee3943a9.module.wasm 139 bytes [emitted] [immutable] (auxiliary name: main)
chunk (runtime: main) output.js (main) 696 bytes (javascript) 139 bytes (webassembly) 3.36 KiB
  > ./example.js main
    runtime modules 3.36 KiB 6 modules
    dependent modules 449 bytes (javascript) 139 bytes (webassembly) [dependent] 4 modules
    ./example.js 247 bytes [built] [code generated]
      [no exports]
      [used exports unknown]
    entry ./example.js main
webpack 5.51.1 compiled successfully

```

### Production mode

```

asset output.js 2.34 KiB [emitted] [minimized] (name: main)
asset 05aa07f6a3836ded50d1.module.wasm 139 bytes [emitted] [immutable] (auxiliary name: main)
chunk (runtime: main) output.js (main) 696 bytes (javascript) 139 bytes (webassembly) 3.09 KiB
  > ./example.js main
    runtime modules 3.09 KiB 5 modules
    dependent modules 449 bytes (javascript) 139 bytes (webassembly) [dependent] 4 modules
    ./example.js 247 bytes [built] [code generated]
      [no exports]
      [no exports used]
    entry ./example.js main
webpack 5.51.1 compiled successfully

```