



WebAssembly

C input source	Linear assembly bytecode (intermediate representation)	Wasm binary encoding (hexadecimal bytes)
<pre>int factorial(int n) { if (n == 0) return 1; else return n * factorial(n-1); }</pre>	<pre>get_local 0 i64.eqz if (result i64) i64.const 1 else get_local 0 get_local 0 i64.const 1 i64.sub call 0 i64.mul end</pre>	<pre>20 00 50 04 7E 42 01 05 20 00 20 00 42 01 7D 10 00 7E 0B</pre>

The WebAssembly text format can also be written in a folded format using [s-expressions](#). This format is purely [syntactic sugar](#) and has no behavioral differences with the linear format.^[58] An example is shown below:

```
(module  
  (import "math" "exp" (func $exp (param f64) (result f64)))  
  (func (export "doubleExp") (param $0 f64) (result f64)  
    (f64.mul  
      (call $exp  
        (get_local $0)  
      )  
      (f64.const 2)  
    )  
  )  
)
```