

```
example.cpp
bool isEven(int a){
  int b = a % 2;
  if(b == 0)
    return true;
  else
    return false;
}
```

**(1) Compile**  
via Emscripten  
Compiler  
(emcc)

```
example.wasm
0x00 0061 736d 0100 0000 0186 8080 8000 0160 .asm.....
0x10 017f 017f 0382 8080 8000 0100 0484 8080 .....
0x20 8000 0170 0000 0583 8080 8000 0100 0106 ...p.....
0x30 8180 8080 0000 0797 8080 8000 0206 6d65 .....me
0x40 6d6f 7279 0200 0a5f 5a36 6973 4576 656e mory..._Z6isEven
0x50 6900 000a 8e80 8080 0001 8880 8080 0000 i.....
```

**(3) Translate**  
via WebAssembly  
Binary Tool  
(WABT)

```
example.wat
(module (memory 1)
  (func $isEven (param $p0 i32)
    (result i32)
      get_local $p0
      i32.const 1
      i32.and
      i32.eqz
```

(a) C++ Source Program

(b) WebAssembly Binary Format

(d) WebAssembly Text Format

**(2) Execute** via JavaScript glue code to instantiate

```
WebAssembly.instantiateStreaming
(fetch("example.wasm", imports)).then
(o=>{o.instance.exports.isEven()})
```

(c) JavaScript Program

Website or Web Application (e.g., Extensions)