

$\llbracket \text{entry} \rrbracket = \{\}$

$\llbracket x = \text{io.read}() \rrbracket = \{x = \text{io.read}()\}$

$\llbracket \text{while } x > 2 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$

$\llbracket y = x/2 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$

$\llbracket \text{if } y < 6 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$

$\llbracket x = x + y \rrbracket = \{x = x + y, y = x/2, z = z + 10\}$

$\llbracket z = x + 2 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = x + 2\}$

$\llbracket \text{if } z > 3 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = x + 2\}$

$\llbracket x = x/2 \rrbracket = \{x = x/2, y = x/2, z = x + 2\}$

$\llbracket z = z + 10 \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$

$\llbracket \text{print}(x) \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$

$\llbracket \text{exit} \rrbracket = \{x = \text{io.read}(), x = x + y, x = x/2, y = x/2, z = z + 10\}$