



main.cph

sample.txt

```

actor scale (k: unsigned<8>)
in (i:unsigned<8>)
out (o:unsigned<8>)
rules i -> o
| x -> k*x
;

stream inp:unsigned<8> from "sample.txt";
stream outp:unsigned<8> to "result.txt";

net outp = scale 2 inp;

```

main_net.cpp

scale_act.h

scale_act.cpp

```

// -----
// This file has been automatically generated by the Caph compiler (version
// 2.8.3)
// from file main.cph, on 2017-05-31 at 17:14:34, by <unknown>
// For more information, see : http://caph.univ-bpdermont.fr
// -----

#include "scale_act.h"

void scale_act::main(void) {
    while ( 1 ) {
        wait(); // clk
        // rule 0: i.rdy, o.rdy / p_x=i, wr(o,k*p_x)
        if ( (i->rd_rdy()) && (o->wr_rdy()) ) {
            p_x = i->read();
            o->write((k)*(p_x));
        }
    }
}

```

```
> "C:\Program Files\Caph\bin\caphc" -prefix main -systemc main.cph
```

```

# -----
# This is the Caph compiler, version 2.8.3
# (C) 2011-2017 J. Serot (Jocelyn.Serot@univ-bpdermont.fr)
# For more information, see : http://caph.univ-bpdermont.fr
# -----
# Wrote file .\main_expanded.dot
# Wrote file .\main_net.cpp
# Wrote file .\scale_act.h
# Wrote file .\scale_act.cpp

```