

# fmal v13

hir12

November 2022

```
{;;;
Notkun: Producer()
Fyrir: i er tala frá 0 upp í 10000
Gildi: Býr til  $i^2$  og setur inn í c sem er channel.

Notkun: Consumer()
Fyrir: i er tala frá 0 upp í 10000, sum er summa talna úr c.
Gildi: Summa talna úr c, sent í r sem er annað channel.
;;;}

"V13e.mexe" = main in
{{
main =
  fun() {
    var c = makeChannel();
    var r = makeChannel();

    rec fun Producer(){
      var i = bigInteger(0);
      while (i != 10000){
        i = i+1;
        c <- i*i;
      };
    };

    rec fun Consumer(){
      var i = bigInteger(0);
      var sum = bigInteger(0);
      while (i != 10000){
        i = i+1;
        sum = sum + <-c;
      };
    };
  };
}}
```

```

        r <- sum;
    };

    go{Producer()};
    go{Producer()};
    go{Consumer()};
    go{Consumer()};
    val x = <- r;
    val y = <- r;
    write(x);
    write("+");
    write(y);
    writeln("="++(x+y));
};
}}
*
BASIS
;

```

```

C:\Users\Hákon Ingi\VS code\javavitleysa>java -jar morpho.jar -c V13e.morpho
Reused 1837 out of 2509 operations, 672 operation objects used.
Reuse ratio is 73%

C:\Users\Hákon Ingi\VS code\javavitleysa>java -jar morpho.jar V13e
245654867259+421111802741=666766670000

C:\Users\Hákon Ingi\VS code\javavitleysa>java -jar morpho.jar V13e
309703140007+357063529993=666766670000

C:\Users\Hákon Ingi\VS code\javavitleysa>java -jar morpho.jar V13e
264390874427+402375795573=666766670000

```