

[\[Browse source program\]](#) [\[Execute source program\]](#)

```
infixl 8 **
a ** b | b >= 0 = accum 1 a b
  where accum x y z | z == 0      = x
                    | otherwise = accum aux (y * y) (z `div` 2)
                    where aux = if (z `mod` 2 == 1) then x * y else x

-- test = map (2**) [0,10,20,30,40]
-- expect: [1,1024,1048576,1073741824,1099511627776]
```