

Побитови операции

Аритметични и логически двоични операции

+	0	1
0	0	1
1	1	10

*	0	1
0	0	0
1	0	1

&	0	1
0	0	0
1	0	1

	0	1
0	0	1
1	1	1

^	0	1
0	0	1
1	1	0

~	
0	1
1	0

Побитови операции

&	0	0	1	0	1	0	1	0
	1	0	1	0	0	0	1	1
=	0	0	1	0	0	0	1	0

	0	0	1	0	1	0	1	0
	1	0	1	0	0	0	1	1
=	1	0	1	0	1	0	1	1

^	0	0	1	0	1	0	1	0
	1	0	1	0	0	0	1	1
=	1	0	0	0	1	0	0	1

~	0	0	1	0	1	0	1	0
	1	1	0	1	0	1	0	1

Побитово изместване

<<2	1	0	1	0	1	1	0	1
	1	0	1	1	0	1	0	0

$$a \ll x \leftrightarrow (a * 2^x) \% 2^8$$

>>2	1	0	1	0	1	1	0	1
	0	0	1	0	1	0	1	1

$$a \gg x \leftrightarrow a / 2^x$$

Маски

Записване на битове

&	0	0	1	0	1	1	1	0
	1	1	1	1	1	0	1	1
=	0	0	1	0	1	0	1	0

	0	0	1	0	1	1	1	0
	0	0	0	1	0	0	0	0
=	0	0	1	1	1	1	1	0

Прочитане на битове

&	0	0	1	0	1	1	1	0
	0	0	0	0	0	1	0	0
=	0	0	0	0	0	1	0	0

&	0	0	1	0	1	1	1	0
	0	0	0	1	0	0	0	0
=	0	0	0	0	0	0	0	0

Операции с маски

Конструирание

$\ll 3$	0	0	0	0	0	0	0	1
\sim	0	0	0	0	1	0	0	0
	1	1	1	1	0	1	1	1

$\ll 3$	0	0	0	0	0	0	0	1
-1	0	0	0	0	1	0	0	0
\sim	0	0	0	0	0	1	1	1
	1	1	1	1	1	0	0	0

Комбиниране

$ $	0	0	0	0	1	0	0	0
	0	0	1	0	0	0	0	0
	0	0	1	0	1	0	0	0

$\&$	1	1	1	1	1	0	1	1
	1	1	1	0	1	1	1	1
	1	1	1	0	1	0	1	1