

Laboratório de Sistemas Digitais

Exercícios sobre operações aritméticas e deteção de overflow sem sinal e com sinal (complemento para 2)

	Representação em binário	Representação em decimal	
		Considerando quantidades sem sinal	Considerando quantidades com sinal
1	$ \begin{array}{r} 0 & 0 & 1 & 1 \\ + & 0 & 1 & 0 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
2	$ \begin{array}{r} 0 & 0 & 1 & 1 \\ + & 1 & 1 & 0 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
3	$ \begin{array}{r} 1 & 1 & 0 & 1 \\ + & 0 & 1 & 0 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
4	$ \begin{array}{r} 1 & 1 & 0 & 1 \\ + & 1 & 1 & 0 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
5	$ \begin{array}{r} 0 & 1 & 0 & 1 \\ + & 0 & 1 & 1 & 1 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
6	$ \begin{array}{r} 0 & 1 & 0 & 1 \\ + & 1 & 0 & 0 & 1 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
7	$ \begin{array}{r} 1 & 0 & 1 & 1 \\ + & 0 & 1 & 1 & 1 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
8	$ \begin{array}{r} 1 & 0 & 1 & 1 \\ + & 1 & 0 & 0 & 1 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
9	$ \begin{array}{r} 1 & 0 & 0 & 0 \\ + & 0 & 1 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
10	$ \begin{array}{r} 1 & 0 & 0 & 0 \\ + & 1 & 0 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
11	$ \begin{array}{r} 1 & 0 & 0 & 0 \\ + & 0 & 1 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
12	$ \begin{array}{r} 1 & 0 & 0 & 0 \\ + & 1 & 0 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
13	$ \begin{array}{r} 0 & 0 & 1 & 0 \\ + & 0 & 0 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
14	$ \begin{array}{r} 0 & 0 & 1 & 0 \\ + & 1 & 1 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
15	$ \begin{array}{r} 1 & 1 & 1 & 0 \\ + & 0 & 0 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)
16	$ \begin{array}{r} 1 & 1 & 1 & 0 \\ + & 1 & 1 & 1 & 0 \end{array} $	$+ \quad \quad \quad$ Overflow? (s/n)	$+ \quad \quad \quad$ Overflow? (s/n)