

Laboratorio #4

Sebastián García

① -400

$$400 = \begin{array}{c|c|c|c|c|c|c|c|c|c|c|c|c|} 512 & 256 & 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 & & & \\ \hline & 1 & 1 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & & & \end{array}$$

$$\begin{array}{c} 1 \ 1 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \\ 1 \ 0 \ 1 \ 1 \ 0 \ 1 \ 1 \ 1 \end{array} a_1$$

$$1 \ 1 \ 1 \ 1 \ 0 \ 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ a_2 = -400$$

3054

$$\begin{array}{c|c|c|c|c|c|c|c|c|c|c|c|c|} 4096 & 2048 & 1024 & 512 & 256 & 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \\ \hline & 1 & 0 & 1 & 1 & 1 & 1 & 1 & 0 & 1 & 1 & 1 & 0 \end{array}$$

$$3054 \ 1 \ 0 \ 1 \ 1 \ 1 \ 1 \ 0 \ 1 \ 1 \ 0$$

②

$$\begin{array}{r} 1 \ 0 \ 1 \ 0 \ 1 \ 1 \ 1 \\ + 1 \ 0 \ 1 \ 0 \ 1 \\ \hline 1 \ 1 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 = 196 \end{array}$$

no overflow

$$\begin{array}{r} 1 \ 1 \ 1 \ 1 \ 0 \ 1 \ 0 \\ + 1 \ 1 \ 0 \ 1 \ 1 \ 0 \ 1 \\ \hline 1 \ 0 \ 1 \ 0 \ 1 \ 0 \ 1 \ 0 \end{array}$$

overflow

③

$$\begin{array}{r} 1 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \\ - 1 \ 1 \ 1 \ 0 \ 1 \\ \hline \end{array} \rightarrow$$

$$\begin{array}{r} 1 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \\ + 1 \ 1 \ 1 \ 0 \ 0 \ 0 \ 1 \ 1 \\ \hline 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \end{array}$$

$$\begin{array}{r} 1 \ 1 \ 1 \ 0 \ 1 \ 29 \\ a_1 \ 0 \ 0 \ 0 \ 1 \ 0 \\ a_2 \ 0 \ 0 \ 0 \ 1 \ 1 \end{array}$$

132

$$\begin{array}{r} 11100101 \\ - 10010101 \\ \hline \end{array}$$

$$\begin{array}{r} 10010101 \rightarrow 149 \\ 01101010 \rightarrow a1 \\ 01101011 \rightarrow a2 \end{array}$$

$$\begin{array}{r} 11100101 \\ + 01101011 \\ \hline 101010000 \end{array} \rightarrow 80$$

$$\begin{array}{r} 110111 \\ - 1011 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ a1 \quad 1011 \\ a2 \quad 110101 \end{array}$$

$$\begin{array}{r} 110111 \\ + 110101 \\ \hline 1101100 \end{array} \rightarrow 44$$

4

$$\begin{array}{r} 10100111 \\ \times 1101 \\ \hline 10100111 \\ 00000000 \\ 10100111 \\ 10100111 \\ \hline 10000111011 \end{array} \rightarrow 2171$$

$$\begin{array}{r} 10000101 \\ \times 1111 \\ \hline 10000101 \\ 10000101 \\ 10000101 \\ 10000101 \\ \hline 1111100101 \end{array} \rightarrow 1495$$

Palabra

+ gloriawelt amenaza con bombardear peten

Ultimo genero

$$\begin{array}{r}
 * 42 \rightarrow \begin{array}{cccccc} 1 & 0 & 1 & 0 & 1 & 0 \\ & & & & & * 10 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 & 1 & 0 & 0 \end{array}
 \end{array}$$

84 \rightarrow +

$$\begin{array}{r}
 @ 64 \rightarrow \begin{array}{ccccccc} 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ + & 0 & 1 & 0 & 0 & 0 & 0 & 1 \\ \hline 0 & 1 & 1 & 0 & 0 & 0 & 0 & 1 \end{array}
 \end{array}$$

97 \rightarrow a

$$\begin{array}{r}
 \Sigma 90 \rightarrow \begin{array}{ccccccc} 1 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 & 1 \\ \hline 0 & 1 & 1 & 1 & 1 & 0 & 0 & 1 \end{array}
 \end{array}$$

121 \Rightarrow y

$$\begin{array}{r}
 + \rightarrow 43 \begin{array}{ccccccc} & & & 1 & 0 & 1 & 0 & 1 & 1 \\ + & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 1 \\ \hline 0 & 1 & 1 & 0 & 1 & 1 & 0 & 0 & 0 \end{array}
 \end{array}$$

108 \Rightarrow l

$$\begin{array}{r}
 p \rightarrow 80 \begin{array}{ccccccc} & & & 1 & 0 & 1 & 0 & 0 & 0 & 0 \\ + & 0 & 0 & 0 & 1 & 1 & 1 & 1 & 1 \\ \hline 0 & 1 & 1 & 0 & 1 & 1 & 1 & 1 & 1 \end{array}
 \end{array}$$

111 \rightarrow 0

128	64	32	16	8	4	2	1
	1	0	1	0	1	0	0
0	1	1	0	0	0	0	1
	1	0	0	1	1	0	0
0	1	1	0	1	1	0	0
0	1	1	0	1	1	0	0
0	1	1	0	1	1	1	1
0	1	1	1	0	0	1	0

1

A \rightarrow 142 \Rightarrow

$$\begin{array}{r}
 \begin{array}{ccccccc} 0 & 0 & 1 & 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 0 & 0 & 1 & 0 & 0 \end{array}
 \end{array}$$

114 \rightarrow 7

taylor

3751

$$\begin{array}{r} 110011 \\ + 100000 \\ \hline 1010011 \end{array}$$

83 \Rightarrow S

Ü 151

$$\begin{array}{r} 10010111 \\ 11100000 \\ \hline 101110111 \end{array}$$

$$\begin{array}{r} 00100000 \\ 11011111 \\ \hline 11100100 \end{array}$$

119 w

© 137

$$\begin{array}{r} 10001001 \\ 11100000 \\ \hline 101101001 \end{array}$$

105 \Rightarrow i

& 134

$$\begin{array}{r} 10000110 \\ 11100000 \\ \hline 101100110 \end{array}$$

102 \Rightarrow f

Ö 148

$$\begin{array}{r} 10010100 \\ 11100000 \\ \hline 101110100 \end{array}$$

116 \Rightarrow t

Swift

33

$$\begin{array}{r}
 00100001 \\
 11 \\
 00100001 \\
 \hline
 00100001 \\
 00110001
 \end{array}$$

El resto Salio Por PC

99 → C

P 80

$$\begin{array}{r}
 1010000 \\
 0001111 \\
 \hline
 1101111
 \end{array}$$

111 → 0

V → 85

$$\begin{array}{r}
 01010101 \\
 00011001 \\
 \hline
 0110110
 \end{array}$$

110 → 7