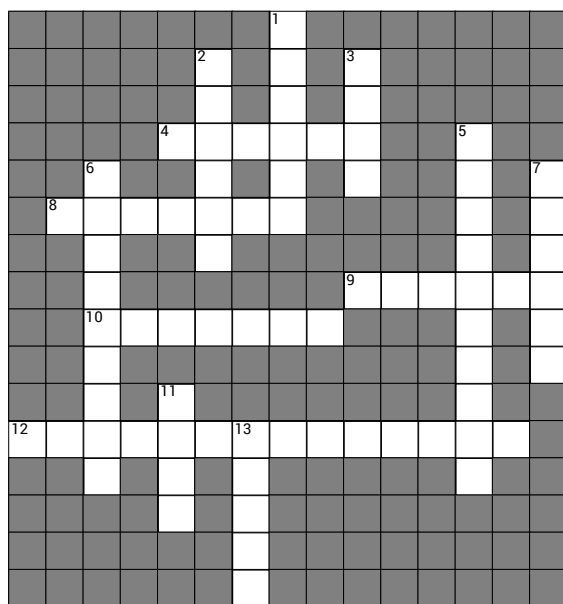


Puzzles

Crossword



Across. 4 Measure of stability that will haunt your waking hours 8 Less exciting now they're not to concerts 9 Backups with a side of fish 10 Ability to handle growth 12 Git is used for this

Down. 1 “_____ Ain’t Gonna Insist On Sainthood” **2** Automation, with you pulling the strings **3** Like 2, with more food involved **5** Virtual machine, first released in 2007 **6** Network analyser in the form of an aquatic predator **7** 3 with a pricetag **11** Lag, outside gaming **13** Proxy server, engine in disguise

Takuzu

0	1	0		0	1	0		1	0
	0		0		0			0	0
0	1		0	0		0	0		1
	0	0			0		0	0	1
0			0		0			0	0
0	0		1	0		0	0	1	
	0	0	1	1	0	0		1	0
		0	0		0		0	0	
0	1		0	0		0		0	
1	0	0		0	1		0		0

Brain Teasers

- A. Can we assume without loss of generality that a computer program has access to its own source code?
 - B. A downstairs panel contains three on-off switches. One of them controls the electricity for the basement, in which there are several lights and your server racks, the other two are duds (you really need to get them fixed). Using only one trip to the basement, how do you determine which switch controls the electricity?
- Bonus.** What's tiny and yellow and very, very, dangerous?

Issue 107 Solutions

Brain Teasers

A. 19

B. ATGCATGAT

C. Yes, an inductive proof shows this. Let the base case be an odd integer n where $n^2 \bmod 8 = 1$; does $(n + 2)^2$ also yield 1 under modulo 8?

Takuzu

1	1	0	1	0	0	1	1	0	0
1	0	1	0	1	0	0	1	0	1
0	1	1	0	0	1	0	0	1	1
1	0	0	1	0	1	1	0	1	0
1	0	0	1	1	0	0	1	0	1
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0	0	1	1	0	1	1	0	0	1
1	0	0	1	0	0	1	1	0	1
0	1	0	0	1	1	0	1	1	0
0	1	1	0	1	0	1	0	1	0

Crossword

			H	A	M	M	I	N	G	D	I	S	T	A	N	C	E
		B			H		B	O	Y	E	R	M	O	O	R		E
Z					I												C
A		O					D	A	T	A	B	A	S	E			T
L		P					D					D					F
G		Y					E					I					C
O		T			N		M					T					F
R		H			M		I					D					H
M	I	C	R	O	N	A	R	R	A	I		C		I			C
T		N					R			R		A	S	S	A	Y	F
H					K					O			T				E
M						B	I	O	I	N	F	O	R	M	A	T	I
					V					L			N				C
										U							S
						S	U	F	F	I	X	T	R	E	E	S	
										D							
						D	A	T	A	M	I	N	I	N	G		
										C							
										S	U	B	S	T	R	I	N

■ *Emily Saunders Walmsley*