



Таблица 1 100 гроссмейстеров шахматной композиции на конец 2021 г  
Table 1 100 grandmasters of chess composition as of the end of 2021

Abdurahmanovic	Fomichev	Kuzovkov	Rehm
Afek	Fritz	Lindgren	Rice
Agapov	Gamnitzer	Linss	Rudenko
Ahues	Garai	Lobusov	Rusinek
Alaikov	Gavrilovski	Lorinc	Ryabinin
Aschwanden	Gockel	Loshinsky	Salai
Avner	Goldschmeding	Loustau	Selivanov
Azhusin	Goumondy	Macleod	Semenenko
Bakcsi	Grin	Mandler	Shanshin
Bartolovic	Gurgenidze	Mansfield	Shavyrin
Bazlov	Gurov	Marandyuk	Slesarenko
Becker	Gvozdjak	Minski	Sochnev
Bogdanov	Haring	Mladenovic	Soroka
Bron	Havel	Myllyniemi	Stojnic
Bruch	Heinonen	Nadareishvili	Styopochkin
Bwee	Janevski	Nestorescu	Tribowski
Caillaud	Jones	Pachl	Trommler
Chepizhny	Kasparyan	Pachman	Tura
Cheyland	Keller	Paros	Velimirovic
Csak	Kopyl	Parrinello	Visserman
Degener	Korolkov	Pervakov	Vladimirov
Dobrescu	Kovacevic	Petkov	Vukcevic
Dragoun	Kralin	Petrovic	Wenda
Dyachuk	Krikheli	Pilchenko	Widlert
Feoktistov	Krizhanivsky	Pogosyants	Zappas

### Дополнительный конкурс | An additional competition

Сделать кроссворд, используя таблицу имён гроссмейстеров на поле 8x8, таким образом, чтобы затем, заменяя буквы на фигуры (одинаковые буквы = одинаковые виды фигур), можно было получить корректную композицию любого жанра. В созданной композиции должен быть минимум ненужных фигур.

Make a crossword puzzle using grandmasters' names within an 8x8 square in such a way that a correct composition of any genre could be obtained by replacing letters with pieces (same letters standing for same type of pieces).

#### ПРИМЕР | EXAMPLE

	Белые/White	Чёрные/Black	
	L-Kg5	E- Ke3	
	H-Qe5	I I- Rg3, Rh6	
	T-Rd4	SS- Be2, Bg7	
	G-Bd6	AAA-p e6, g4, g6	
	RR-Sf4, Sf6		
U- P e4			
1. S4d5!+ exd5		2. Sxd5+ Kf2	
		3. Qxg3+ Kf1	
		4. Se3#	

Этот пример доказывает теоретическую возможность создания такого кроссворда-композиции.  
This example shows the theoretical possibility of creating such a crossword-based composition.

Кроссворды-композиции присылать не позднее **2 января 2022 г.** на адрес: [Popovgl@yandex.ru](mailto:Popovgl@yandex.ru)  
Crossword-based composition are to be sent no later than **January 2, 2022**,  
by email to [Popovgl@yandex.ru](mailto:Popovgl@yandex.ru) (Grigory Popov).

# Итоги конкурса кроссвордистов – “ГРОССВОРД” The results crossword competition – "GROSSWORD"

Победитель | Winner - **Michael Lütt(Germany)** (30+28 = **58** слов/words):

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

AFEK crosses AVNER BECKER  
 AGAPOV crosses LINDGREN PARRINELLO VISSERMAN  
 AHUES crosses SOROKA BRUCH ZAPPAS  
 AVNER crosses AFEK GOCKEL  
 AZHUSIN crosses ZAPPAS LOSHINSKY  
 BAKCSI crosses GARAI FOMICHEV LINSS  
 BARTOLOVIC crosses MACLEOD KOROLKOV  
 BAZLOV crosses KOVACEVIC CAILLAUD  
 BECKER crosses AFEK GRIN  
 BRON crosses TRIBOWSKI SOROKA  
 BRUCH crosses AHUES SOCHNEV  
 BWEE crosses LOBUSOV JONES  
 CAILLAUD crosses CHEYLAN LORINC BAZLOV  
 CHEYLAN crosses CAILLAUD RICE  
 CSAK crosses TRIBOWSKI SOROKA  
 DEGENER crosses PETKOV PARRINELLO VISSERMAN  
 DOBRESU crosses GUROV DRAGOUN  
 DRAGOUN crosses TROMMLER DOBRESU  
 FOMICHEV crosses BAKCSI JANEVSKI  
 FRITZ crosses RUSINEK TROMMLER  
 GARAI crosses BAKCSI JANEVSKI  
 GOCKEL crosses KOROLKOV AVNER  
 GRIN crosses BECKER WENDA  
 GUROV crosses DOBRESU KUZOVKOV  
 HAVEL crosses SALAI RUDENKO  
 JANEVSKI crosses GARAI FOMICHEV LINSS SHANSHIN  
 JONES crosses MACLEOD BWEE  
 KELLER crosses RUSINEK TROMMLER  
 KOROLKOV crosses BARTOLOVIC LOBUSOV GOCKEL

KOVACEVIC crosses LORINC BAZLOV  
 KRALIN crosses PAROS MINSKI  
 KUZOVKOV crosses ZAPPAS GUROV  
 LINDGREN crosses LINSS SHANSHIN AGAPOV  
 LINSS crosses LINDGREN BAKCSI JANEVSKI  
 LOBUSOV crosses MACLEOD BWEE KOROLKOV  
 LORINC crosses KOVACEVIC CAILLAUD  
 LOSHINSKY crosses PACHL AZHUSIN PETKOV  
 MACLEOD crosses BARTOLOVIC LOBUSOV JONES  
 MINSKI crosses PACHMAN KRALIN RICE  
 PACHL crosses ZAPPAS LOSHINSKY  
 PACHMAN crosses PAROS MINSKI  
 PAROS crosses PACHMAN KRALIN  
 PARRINELLO crosses AGAPOV DEGENER PERVAKOV  
 PERVAKOV crosses PETKOV PARRINELLO  
 PETKOV crosses DEGENER LOSHINSKY PERVAKOV  
 RICE crosses RUDENKO MINSKI CHEYLAN  
 RUDENKO crosses RICE HAVEL TRIBOWSKI  
 RUSINEK crosses FRITZ KELLER  
 SALAI crosses HAVEL TRIBOWSKI  
 SHANSHIN crosses SOCHNEV LINDGREN JANEVSKI  
 SOCHNEV crosses SHANSHIN BRUCH  
 SOROKA crosses BRON CSAK AHUES  
 TRIBOWSKI crosses TURA SALAI BRON RUDENKO CSAK  
 TROMMLER crosses FRITZ KELLER DRAGOUN  
 TURA crosses TRIBOWSKI WENDA  
 VISSERMAN crosses AGAPOV DEGENER  
 WENDA crosses GRIN TURA  
 ZAPPAS crosses KUZOVKOV PACHL AZHUSIN AHUES

Составить этот кроссворд помогла комбинация человеческого и искусственного «интеллекта». Была написана программа на Java. Она помогла выйти на уровень 48 слов. Затем стратегия была изменена. Автор интуитивно выделил кроссворды, в которых подозревал, что можно добавить больше слов. В другой версии программы в качестве входных использовались

выбранные кроссворды. В этой версии из кроссворда случайным образом удалялись 5-10 слов, а затем предпринимались попытки дополнить кроссворд снова случайно выбранными словами из списка. В результате получились кроссворды примерно из 55 слов. На третьем этапе были объединены случайное удаление слов и дальнейшее манипулирование с ручным подбором слов. Таким образом, автор смог найти кроссворд из 58 слов.

**Michael Lütt** -Thank you very much for the very interesting crossword task that I tried my hand at with the help of Java.

These were my first thoughts:

a) As an IBM mainframe application programmer for insurance companies, I also attended some Java courses many years ago, but never created professional Java programs, only used them for private purposes.

b) That every word must cross at least 2 other words is a very strong condition.

There will probably be a crossword with many words, but significantly fewer of them will meet the condition.

c) Due to the size of the crossword and the large number of given words, you will hardly be able to try out all combinations from scratch in order to determine the maximum number of words with brute force only.

With this in mind, I started the research.

After getting to about 48 words by brute force, the strategy was changed.

I determined with intuition the crosswords from which I suspected that more words could be added.

In another version of the program, the determined crosswords were used as input.

In this version 5-10 words were randomly removed from a crossword and then attempts were made to supplement the crossword with (again) randomly selected words from the list. This has resulted in crosswords with around 55 words.

In a third step, the random removal of words and the further calculation with brute force were combined.

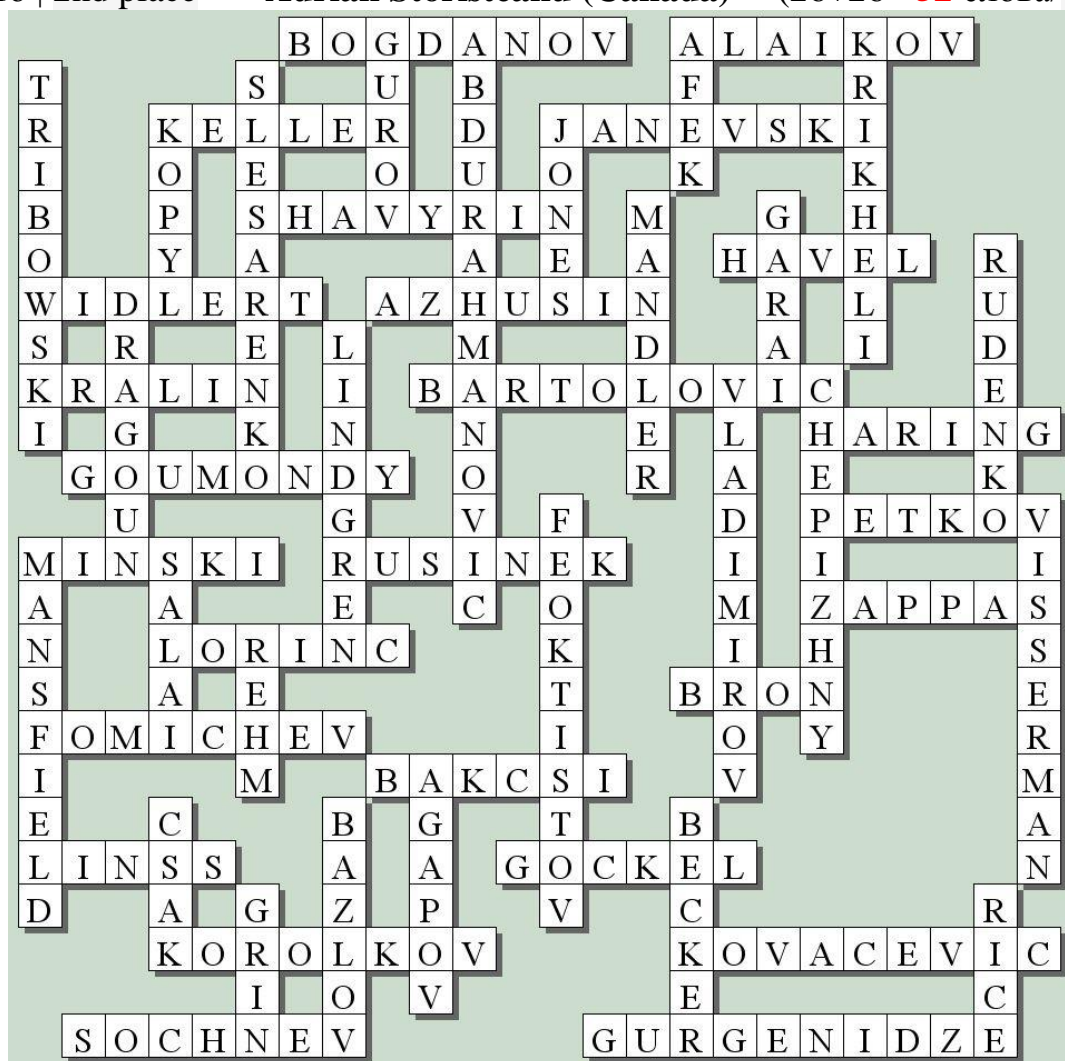
In this way I was able to find a solution that contains 58 words, each crossing at least 2 more words.

Overall, it was a combination of human and artificial "intelligence" in which, in addition to brute force, human intuition and random attempts were used.

My assumption b) has not been confirmed. Even without the "strong" condition, I could only fit 59 words into a crossword.

E.g. in my solution you can add/cross the unused word REHM to the word BECKER.

2 место | 2nd place - **Adrian Storisteanu (Canada)** (26+26 = **52** слова/words):



Составлено с помощью программы Crossword Express. Compiled with Crossword Express.



## Дополнительный конкурс | An additional competition

	Белые/White <b>I</b> =Kg4 <b>R</b> =Qf6 <b>O</b> =Rf5 <b>SS</b> =Sc5 Sf4 <b>BB</b> =Pb4 Pa6	Чёрные/Black <b>P</b> =Kf8 <b>CC</b> =Rc6 Re4 <b>AA</b> =Sc4 Sf7 <b>EE</b> =Bb6 Be6 <b>KKK</b> =Pc3 Pd4 Pd6	
<b>Ralf Krätschmer</b>	1.Sc5:e6+ 1..... Kf8-g8 2.Qf6-g7# 1... Kf8-e8 2.Qf6:f7#		

	Белые/White <b>K</b> =Ke7 <b>I</b> = Qc5 <b>D</b> =Rd5 <b>W</b> =Bb5 <b>RRR</b> = Pc6 Pe2 Pg5	Чёрные/Black <b>F</b> =Kc7 <b>Z</b> = Qc3 <b>LL</b> = Re4 Re5 <b>T</b> =Sc4 Sh5 <b>A</b> =Bb7 <b>EEEE</b> = Pd7 Pe3 Pe6 Pf5	
<b>Ralf Krätschmer</b>	1. c6:d7+ Bb7-c6 2.Qc5-a7+ Bc6-b7 3.d7-d8Q# 1... Kc7-b8 2.d7-d8Q+ Bb7-c8 3.Qd8:c8#		

	Белые/White <b>D</b> = Ka2 <b>Z</b> = Qd5 <b>G</b> =Rc2 <b>R</b> =Bg2 <b>AA</b> =Sc5 Sg6 <b>EEEE</b> = Pb2 Pb3 Pd2 Pf2 Pg3	Чёрные/Black <b>W</b> =Kb4 <b>B</b> =Qb5 <b>V</b> =Rg5 <b>L</b> =Be5 <b>O</b> =Sf5 <b>NN</b> =Pe2 Pg4	
<b>Ralf Krätschmer</b>	1.Sc5-d3+ Kb4-a5 2.b3-b4+ Ka5-a6 3.Qd5-a8+ Ka6-b6 4.Qa8-b7# . 2... Ka5-a4 3. b2-b3# . 2... Ka5-b6 3.Qd5-b7# 1... Qb5:d3 2.Qd5-c5#		

	Белые/White <b>M</b> =Kc4 <b>H</b> = Qc5 <b>LL</b> = Rd6 Re6 <b>KK</b> =Sb6 Sg4 <b>SSS</b> =Pe2 e3 f4	Чёрные/Black <b>N</b> =Ke4 <b>RR</b> = Rc7 Rg6 <b>EE</b> = Sc6 Sf6 <b>III</b> =Pd4 Pe5 Ph4	<p>#5      9+8</p>
	<b>Ralf Krätschmer</b> 1.Rd6:c6 Ke4-f5 2.Sg4-f2 Rg6-h6 3.Qc5:e5+ Kf5-g6 4.Rc6:c7 ~ 5.Qe5-g5/Re6:f6#		

	Белые/White <b>P</b> =Kb6 <b>N</b> =Qd2 <b>AA</b> =Rb5 Rd8 <b>L</b> =Bb2 <b>U</b> =Sd5 <b>HHH</b> = Pb3 Pc5 Pd6	Чёрные/Black <b>E</b> =Ke5 <b>II</b> = Rc2 Rd3 <b>C</b> = Sb4 <b>Z</b> =Bd7 <b>SSSS</b> = Pd4 e2 f2 f5	<p>#6      9+9</p>
	<b>Ralf Krätschmer</b> 1. Qf4+ Ke6 2. Sc7+ Kf6 3. Qh4+ 3. ... Ke5 4. c6+ Rc5 5. Rxc5+ Sd5+ 6. Rxd5#; 3. ... Kf7 4. Qe7+ Kg6 5. Rg8+ Kh6 6. Qh4#; 2. ... Kf7 3. Qh6(4. Rf8#) Sd5+ 4. Ka7(5. Rf8#) Be8 5. Rxe8 ~ 6. Rf8#		

**Many thanks Michael Lütt, Adrian Storisteanu, Ralf Krätschmer!**

Это ностальгически напомнило период жизни, 30 летней давности, когда автор конкурса программировал кроссворды...

