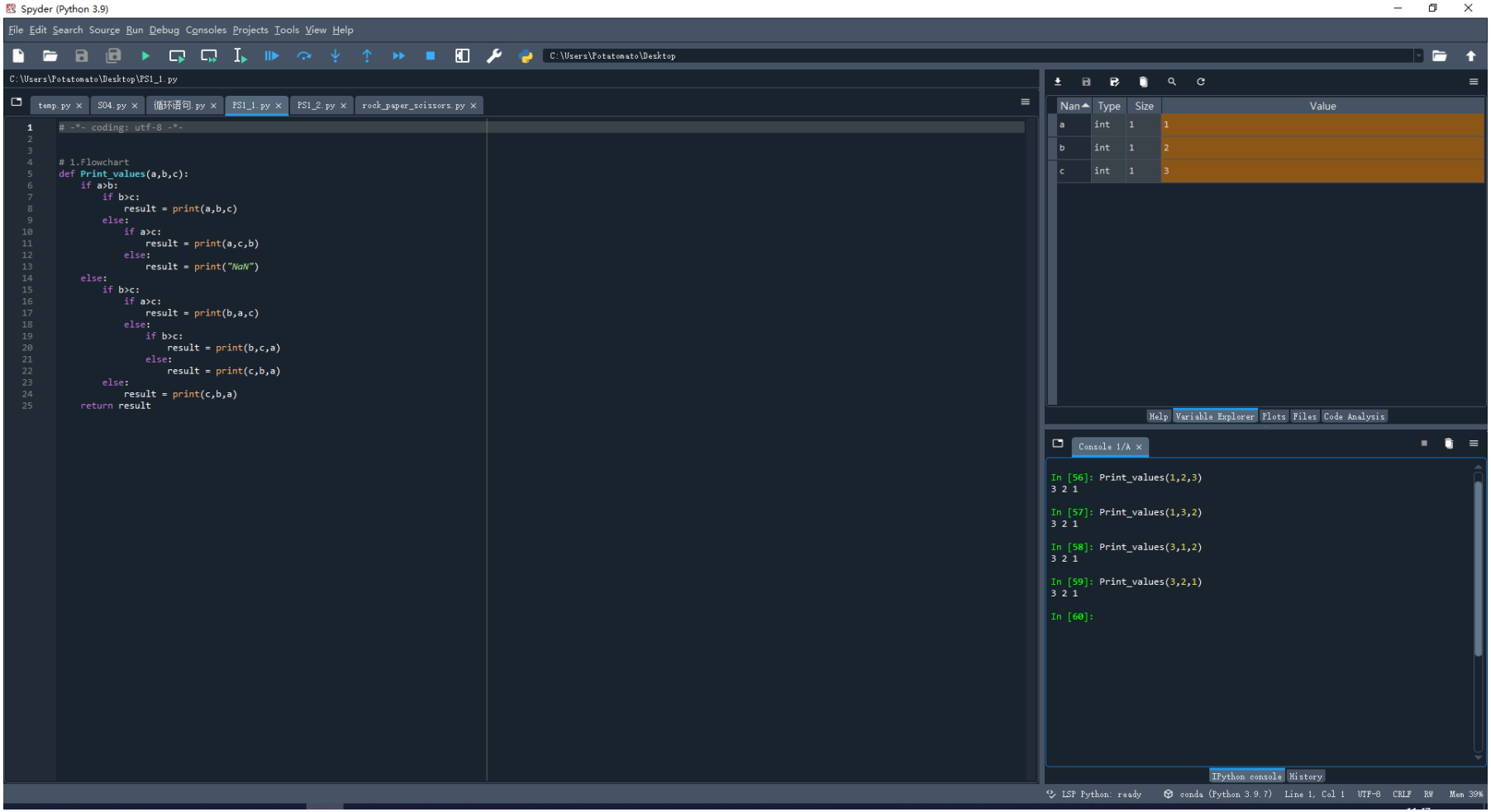
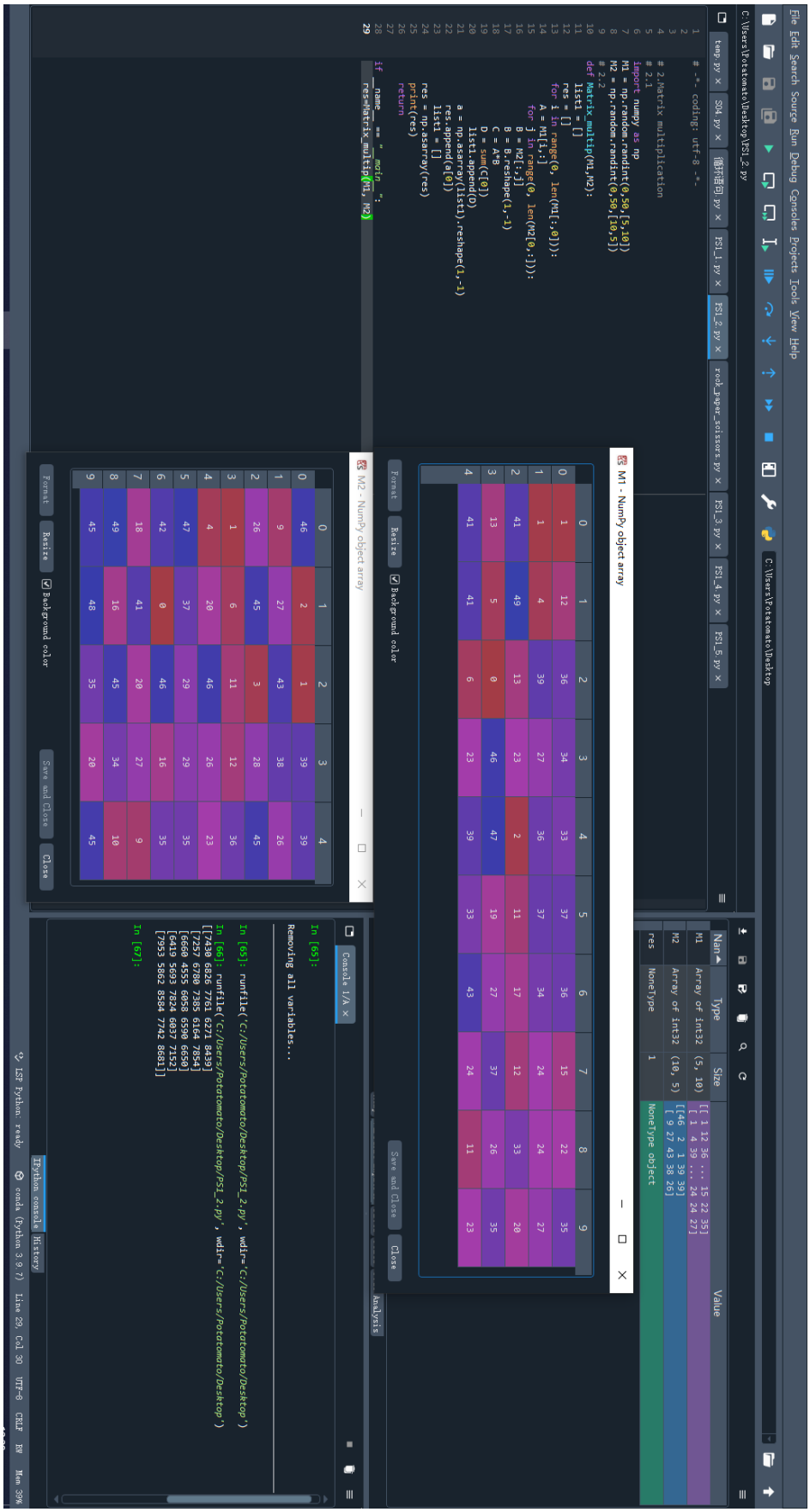
1. Flowcart

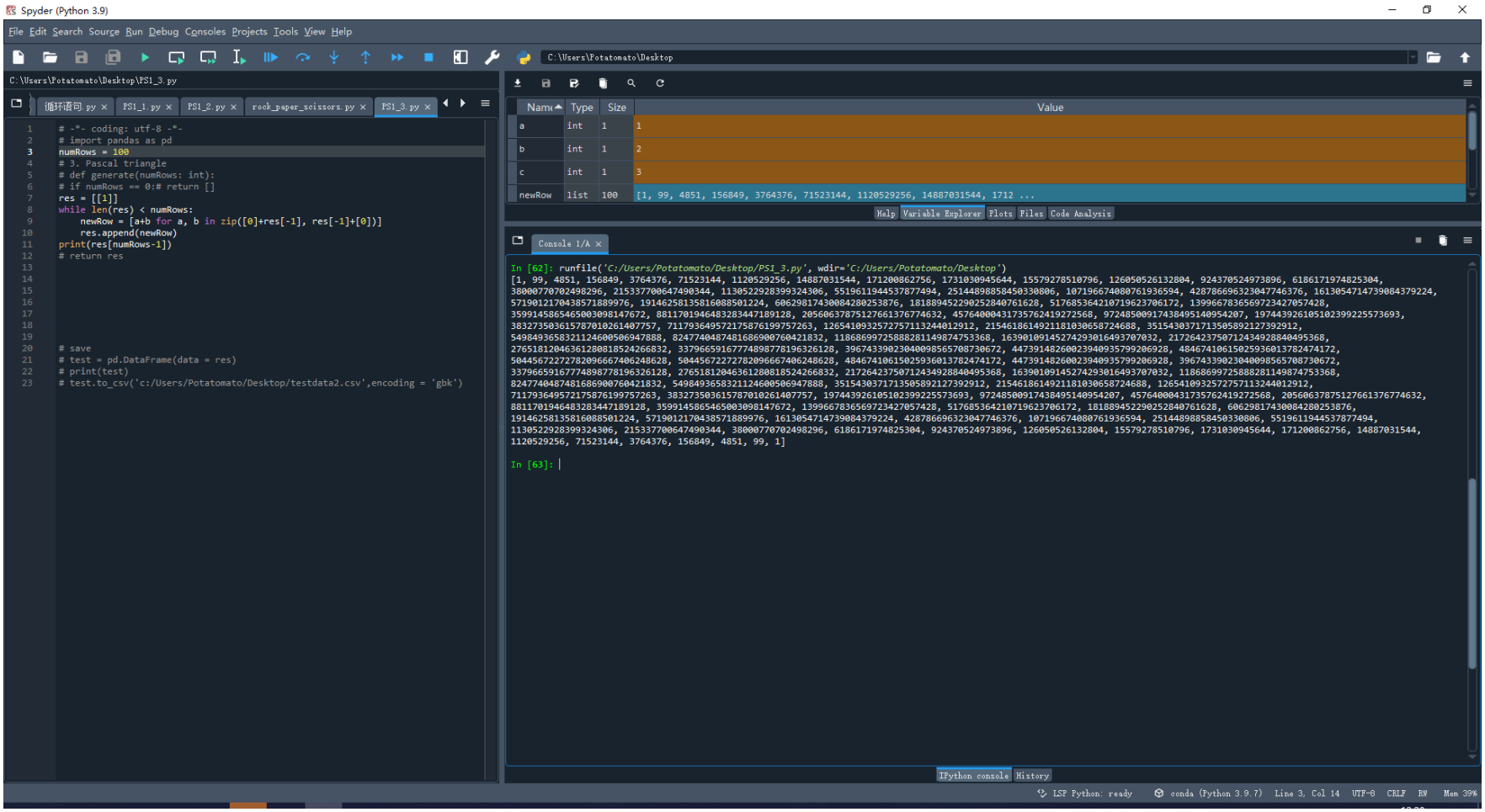

Spyder (Python 3.9)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\Potatomato\Desktop
C:\Users\Potatomato\Desktop\PS1_1.py
temp.py
S04.py
循环语句.py
PS1_1.py
PS1_2.py
rock_paper_scissors.py
# -*- coding: utf-8 -*-
# 1.Flowchart
def Print_values(a,b,c):
if a>b:
if b>c:
result = print(a,b,c)
else:
if a>c:
result = print(a,c,b)
else:
result = print("NaN")
else:
if b>c:
if a>c:
result = print(b,a,c)
else:
if b>c:
result = print(b,c,a)
else:
result = print(c,b,a)
else:
result = print(c,b,a)
return result
Nan
Type
Size
Value
a int 1 1
b int 1 2
c int 1 3
Help
Variable Explorer
Plots
Files
Code Analysis
Console 1/A
In [56]: Print_values(1,2,3)
3 2 1
In [57]: Print_values(1,3,2)
3 2 1
In [58]: Print_values(3,1,2)
3 2 1
In [59]: Print_values(3,2,1)
3 2 1
In [60]:
IPython console
History
LSP Python: ready
conda (Python 3.9.7)
Line 1, Col 1
UTF-8
CRLF
RW
Mem 39%

2．Matrix multiplication

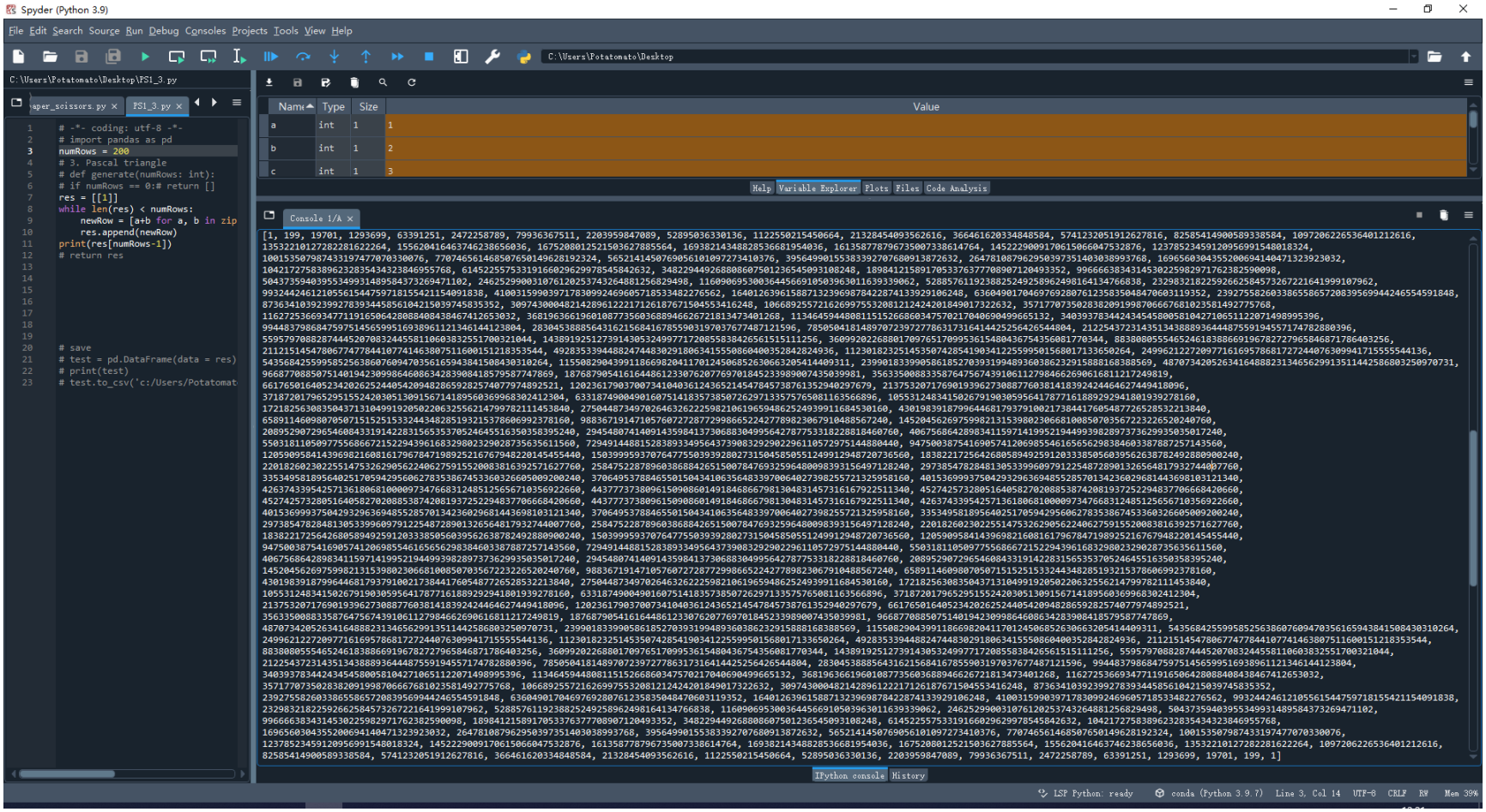


3. Pascal triangle

Pascal_triangle(100)

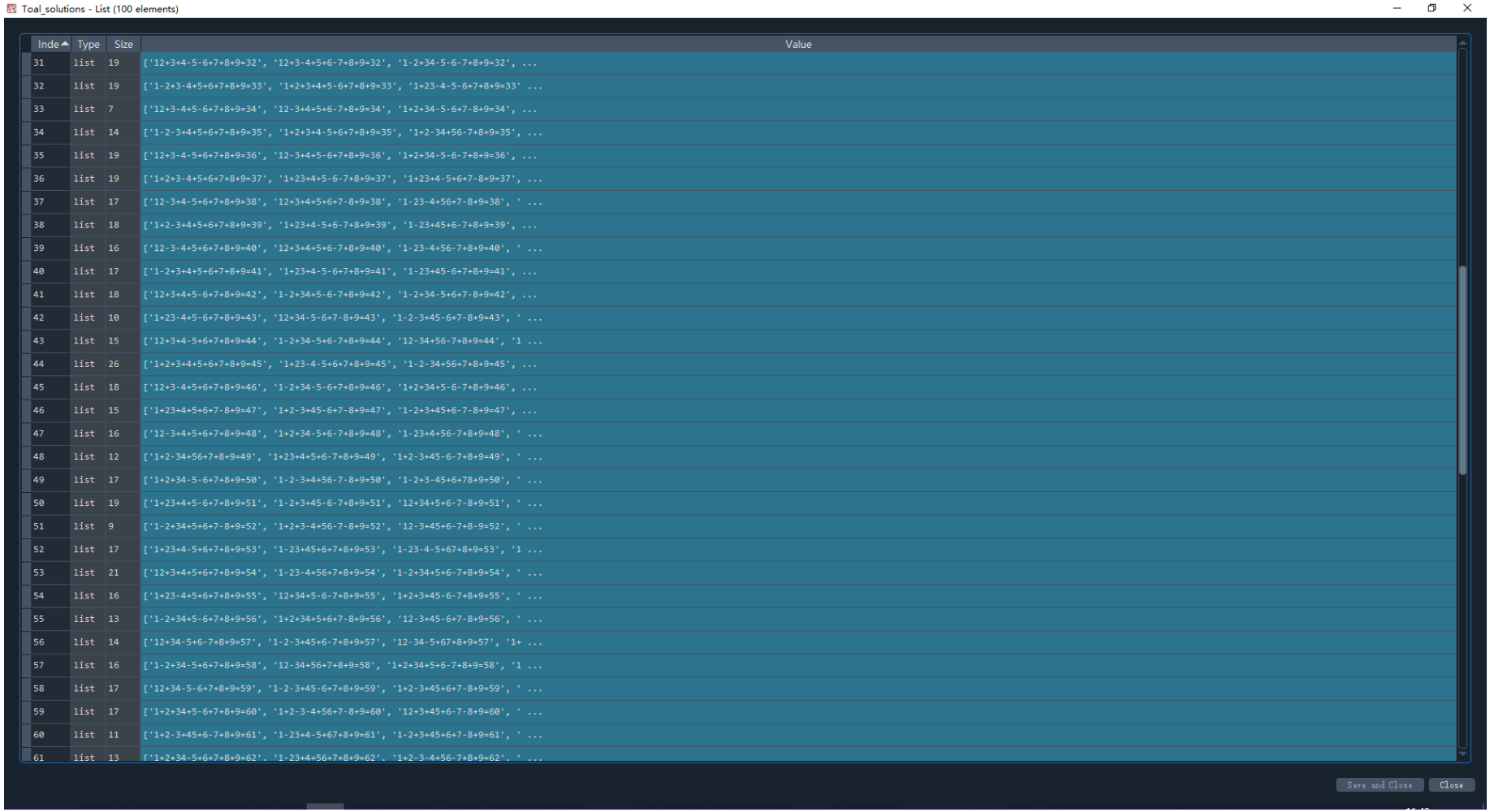


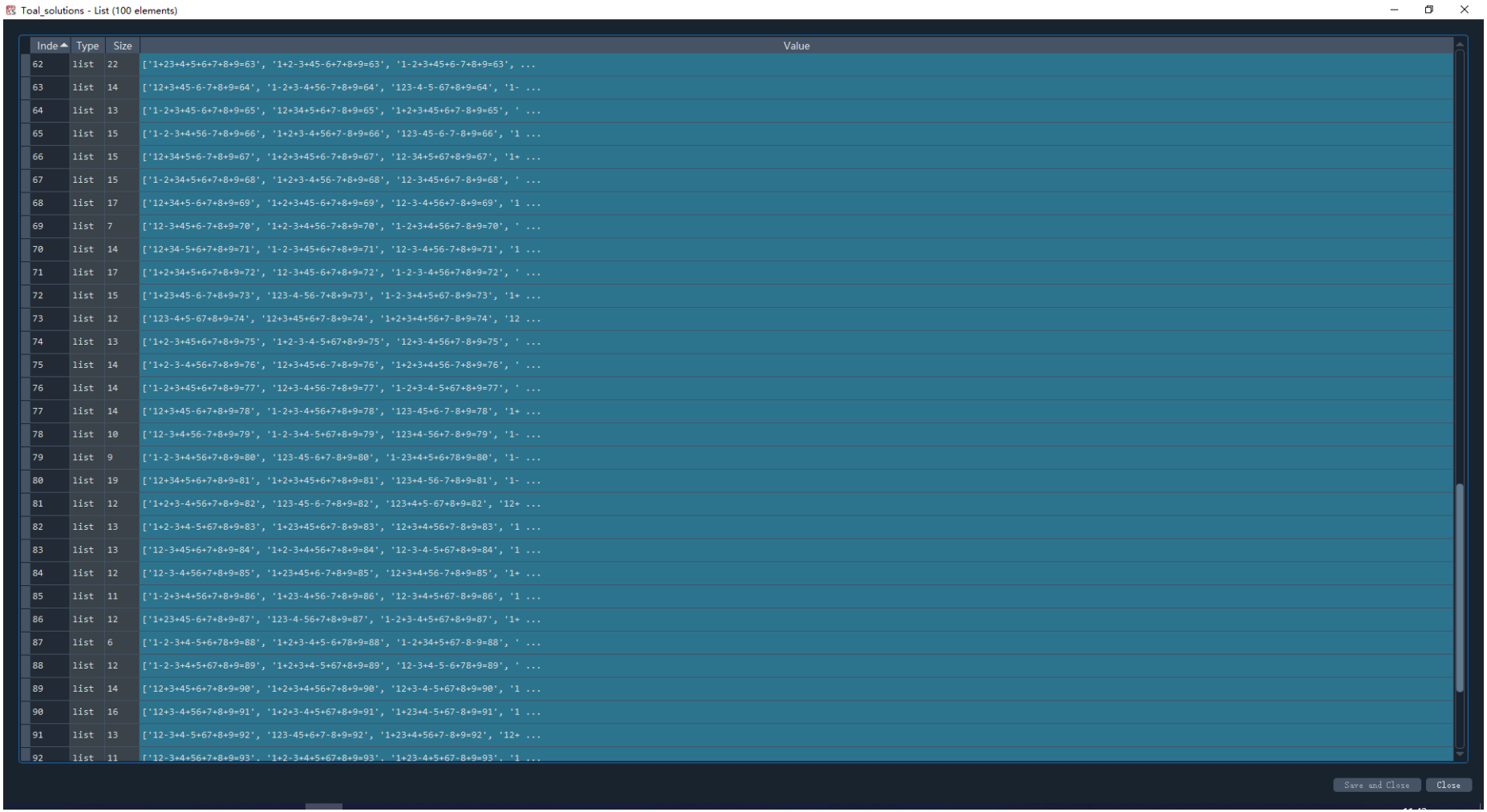
Pascal_triangle(200)

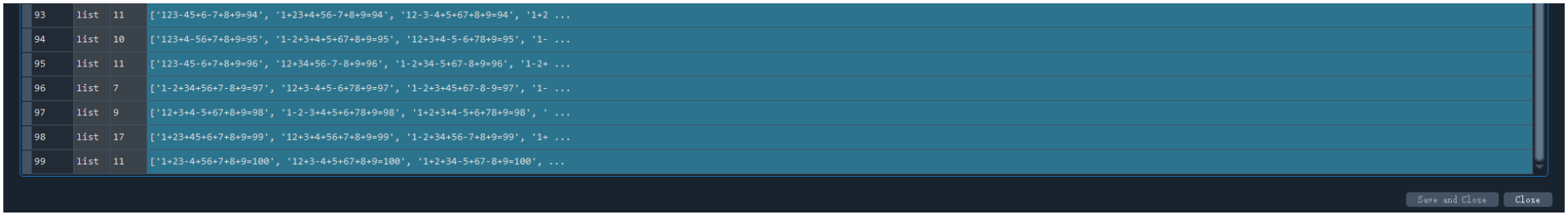


4. Dynamic programming

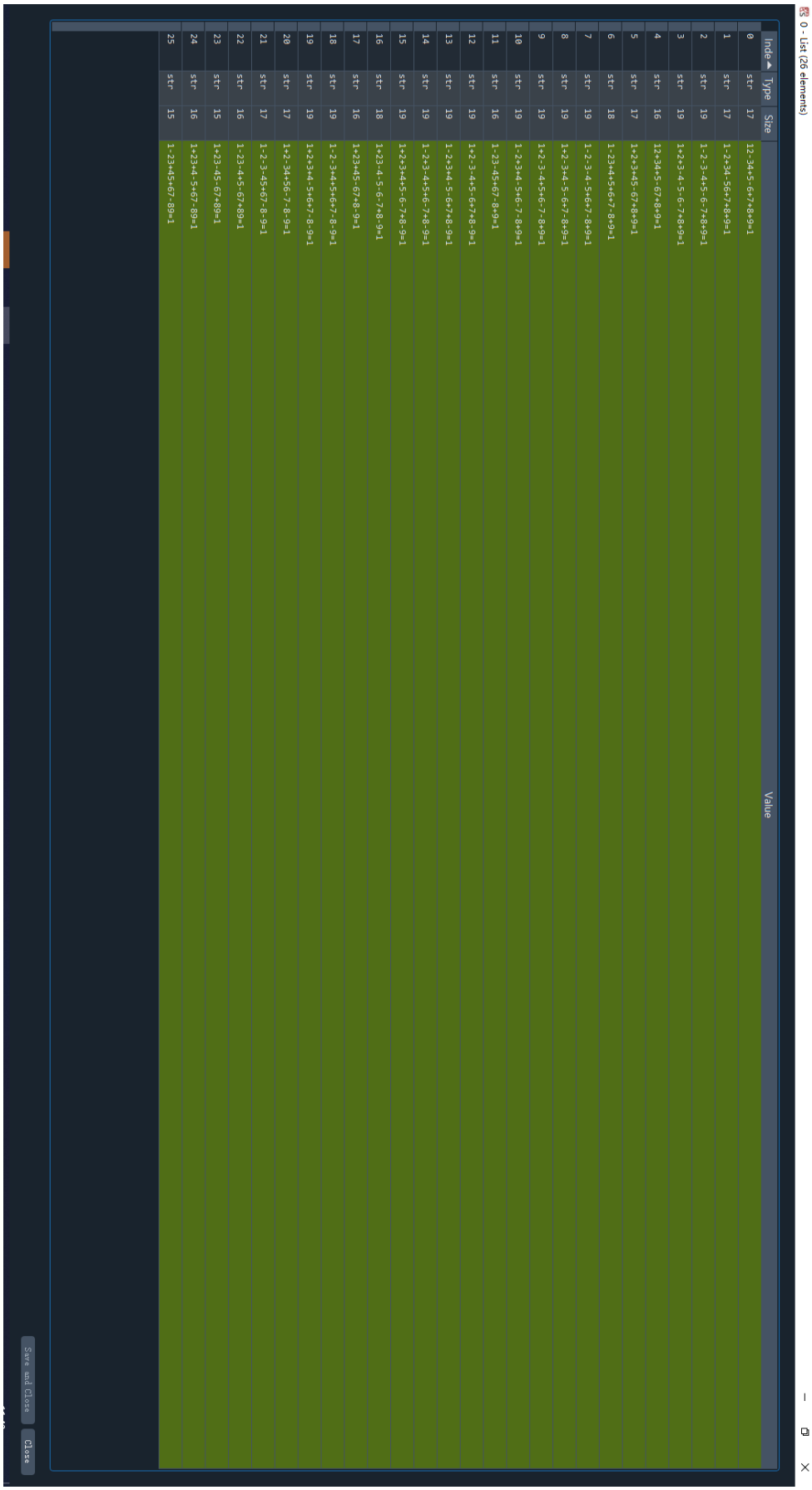
Toal_solutions


Toal_solutions - List (100 elements)
Inde
Type
Size
Value
31 list 19 ['12+3+4-5-6+7+8+9=32', '12+3-4+5+6-7+8+9=32', '1-2+34-5-6-7+8+9=32', ...
32 list 19 ['1-2+3-4+5+6+7+8+9=33', '1+2+3+4+5-6+7+8+9=33', '1+23-4-5-6+7+8+9=33' ...
33 list 7 ['12+3-4+5-6+7+8+9=34', '12-3+4+5+6-7+8+9=34', '1+2+34-5-6+7-8+9=34', ...
34 list 14 ['1-2-3+4+5+6+7+8+9=35', '1+2+3+4-5+6+7+8+9=35', '1+2-34+56-7+8+9=35', ...
35 list 19 ['12+3-4-5+6+7+8+9=36', '12-3+4+5-6+7+8+9=36', '1+2+34-5-6-7+8+9=36', ...
36 list 19 ['1+2+3-4+5+6+7+8+9=37', '1+23+4+5-6-7+8+9=37', '1+23+4-5+6+7-8+9=37', ...
37 list 17 ['12-3+4-5+6+7+8+9=38', '12+3+4+5+6+7-8+9=38', '1-23-4+56+7-8+9=38', ' ...
38 list 18 ['1+2-3+4+5+6+7+8+9=39', '1+23+4-5+6-7+8+9=39', '1-23+45+6-7+8+9=39', ...
39 list 16 ['12-3-4+5+6+7+8+9=40', '12+3+4+5+6-7+8+9=40', '1-23-4+56-7+8+9=40', ' ...
40 list 17 ['1-2+3+4+5+6+7+8+9=41', '1+23+4-5-6+7+8+9=41', '1-23+45-6+7+8+9=41', ...
41 list 18 ['12+3+4+5-6+7+8+9=42', '1-2+34+5-6-7+8+9=42', '1-2+34-5+6+7-8+9=42', ...
42 list 10 ['1+23-4+5-6+7+8+9=43', '12+34-5-6+7-8+9=43', '1-2-3+45-6+7-8+9=43', ' ...
43 list 15 ['12+3+4-5+6+7+8+9=44', '1-2+34-5+6-7+8+9=44', '12-34+56-7+8+9=44', '1 ...
44 list 26 ['1+2+3+4+5+6+7+8+9=45', '1+23-4-5+6+7+8+9=45', '1-2-34+56+7+8+9=45', ...
45 list 18 ['12+3-4+5+6+7+8+9=46', '1-2+34-5-6+7+8+9=46', '1+2+34+5-6-7+8+9=46', ...
46 list 15 ['1+23+4+5+6+7-8+9=47', '1+2-3+45-6+7-8+9=47', '1-2+3+45+6-7-8+9=47', ...
47 list 16 ['12-3+4+5+6+7+8+9=48', '1+2+34-5+6-7+8+9=48', '1-23+4+56-7+8+9=48', ' ...
48 list 12 ['1+2-34+56+7+8+9=49', '1+23+4+5+6-7+8+9=49', '1+2-3+45-6-7+8+9=49', ' ...
49 list 17 ['1+2+34-5-6+7+8+9=50', '1-2-3+4+56-7-8+9=50', '1-2+3-45+6+78+9=50', ' ...
50 list 19 ['1+23+4+5-6+7+8+9=51', '1-2+3+45-6-7+8+9=51', '12+34+5+6-7-8+9=51', ' ...
51 list 9 ['1-2+34+5+6+7-8+9=52', '1+2+3-4+56-7-8+9=52', '12-3+45+6-7+8-9=52', ' ...
52 list 17 ['1+23+4-5+6+7+8+9=53', '1-23+45+6+7+8+9=53', '1-23-4-5+67+8+9=53', '1 ...
53 list 21 ['12+3+4+5+6+7+8+9=54', '1-23-4+56+7+8+9=54', '1-2+34+5+6-7+8+9=54', ' ...
54 list 16 ['1+23-4+5+6+7+8+9=55', '12+34+5-6-7+8+9=55', '1+2+3+45-6-7+8+9=55', ' ...
55 list 13 ['1-2+34+5-6+7+8+9=56', '1+2+34+5+6+7-8+9=56', '12-3+45-6+7-8+9=56', ' ...
56 list 14 ['12+34-5+6-7+8+9=57', '1-2-3+45+6-7+8+9=57', '12-34-5+67+8+9=57', '1+ ...
57 list 16 ['1-2+34-5+6+7+8+9=58', '12-34+56+7+8+9=58', '1+2+34+5+6-7+8+9=58', '1 ...
58 list 17 ['12+34-5-6+7+8+9=59', '1-2-3+45-6+7+8+9=59', '1+2-3+45+6+7-8+9=59', ' ...
59 list 17 ['1+2+34+5-6+7+8+9=60', '1+2-3-4+56+7-8+9=60', '12+3+45+6-7-8+9=60', ' ...
60 list 11 ['1+2-3+45+6-7+8+9=61', '1-23+4-5+67+8+9=61', '1-2+3+45+6+7-8+9=61', ' ...
61 list 13 ['1+2+34-5+6+7+8+9=62', '1-23+4+56+7+8+9=62', '1+2-3-4+56-7+8+9=62', ' ...
Save and Close
Close


Toal_solutions - List (100 elements)
Inde
Type
Size
Value
62 list 22 ['1+23+4+5+6+7+8+9=63', '1+2-3+45-6+7+8+9=63', '1-2+3+45+6-7+8+9=63', ...
63 list 14 ['12+3+45-6-7+8+9=64', '1-2+3-4+56-7+8+9=64', '123-4-5-67+8+9=64', '1- ...
64 list 13 ['1-2+3+45-6+7+8+9=65', '12+34+5+6+7-8+9=65', '1+2+3+45+6+7-8+9=65', ' ...
65 list 15 ['1-2-3+4+56-7+8+9=66', '1+2+3-4+56+7-8+9=66', '123-45-6-7-8+9=66', '1 ...
66 list 15 ['12+34+5+6-7+8+9=67', '1+2+3+45+6-7+8+9=67', '12-34+5+67+8+9=67', '1+ ...
67 list 15 ['1-2+34+5+6+7+8+9=68', '1+2+3-4+56-7+8+9=68', '12-3+45+6+7-8+9=68', ' ...
68 list 17 ['12+34+5-6+7+8+9=69', '1+2+3+45-6+7+8+9=69', '12-3-4+56+7-8+9=69', '1 ...
69 list 7 ['12-3+45+6-7+8+9=70', '1+2-3+4+56-7+8+9=70', '1-2+3+4+56+7-8+9=70', ' ...
70 list 14 ['12+34-5+6+7+8+9=71', '1-2-3+45+6+7+8+9=71', '12-3-4+56-7+8+9=71', '1 ...
71 list 17 ['1+2+34+5+6+7+8+9=72', '12-3+45-6+7+8+9=72', '1-2-3-4+56+7+8+9=72', ' ...
72 list 15 ['1+23+45-6-7+8+9=73', '123-4-56-7+8+9=73', '1-2-3+4+5+67-8+9=73', '1+ ...
73 list 12 ['123-4+5-67+8+9=74', '12+3+45+6+7-8+9=74', '1+2+3+4+56+7-8+9=74', '12 ...
74 list 13 ['1+2-3+45+6+7+8+9=75', '1+2-3-4-5+67+8+9=75', '12+3-4+56+7-8+9=75', ' ...
75 list 14 ['1+2-3-4+56+7+8+9=76', '12+3+45+6-7+8+9=76', '1+2+3+4+56-7+8+9=76', ' ...
76 list 14 ['1-2+3+45+6+7+8+9=77', '12+3-4+56-7+8+9=77', '1-2+3-4-5+67+8+9=77', ' ...
77 list 14 ['12+3+45-6+7+8+9=78', '1-2+3-4+56+7+8+9=78', '123-45+6-7-8+9=78', '1+ ...
78 list 10 ['12-3+4+56-7+8+9=79', '1-2-3+4-5+67+8+9=79', '123+4-56+7-8+9=79', '1- ...
79 list 9 ['1-2-3+4+56+7+8+9=80', '123-45-6+7-8+9=80', '1-23+4+5+6+78+9=80', '1- ...
80 list 19 ['12+34+5+6+7+8+9=81', '1+2+3+45+6+7+8+9=81', '123+4-56-7+8+9=81', '1- ...
81 list 12 ['1+2+3-4+56+7+8+9=82', '123-45-6-7+8+9=82', '123+4+5-67+8+9=82', '12+ ...
82 list 13 ['1+2-3+4-5+67+8+9=83', '1+23+45+6+7-8+9=83', '12+3+4+56+7-8+9=83', '1 ...
83 list 13 ['12-3+45+6+7+8+9=84', '1+2-3+4+56+7+8+9=84', '12-3-4-5+67+8+9=84', '1 ...
84 list 12 ['12-3-4+56+7+8+9=85', '1+23+45+6-7+8+9=85', '12+3+4+56-7+8+9=85', '1+ ...
85 list 11 ['1-2+3+4+56+7+8+9=86', '1+23-4+56-7+8+9=86', '12-3+4+5+67-8+9=86', '1 ...
86 list 12 ['1+23+45-6+7+8+9=87', '123-4-56+7+8+9=87', '1-2+3-4+5+67+8+9=87', '1+ ...
87 list 6 ['1-2-3+4-5+6+78+9=88', '1+2+3-4+5-6+78+9=88', '1-2+34+5+67-8-9=88', ' ...
88 list 12 ['1-2-3+4+5+67+8+9=89', '1+2+3+4-5+67+8+9=89', '12-3+4-5-6+78+9=89', ' ...
89 list 14 ['12+3+45+6+7+8+9=90', '1+2+3+4+56+7+8+9=90', '12+3-4-5+67+8+9=90', '1 ...
90 list 16 ['12+3-4+56+7+8+9=91', '1+2+3-4+5+67+8+9=91', '1+23+4-5+67-8+9=91', '1 ...
91 list 13 ['12-3+4-5+67+8+9=92', '123-45+6+7-8+9=92', '1+23+4+56+7-8+9=92', '12+ ...
92 list 11 ['12-3+4+56+7+8+9=93', '1+2-3+4+5+67+8+9=93', '1+23-4+5+67-8+9=93', '1 ...
Save and Close
Close

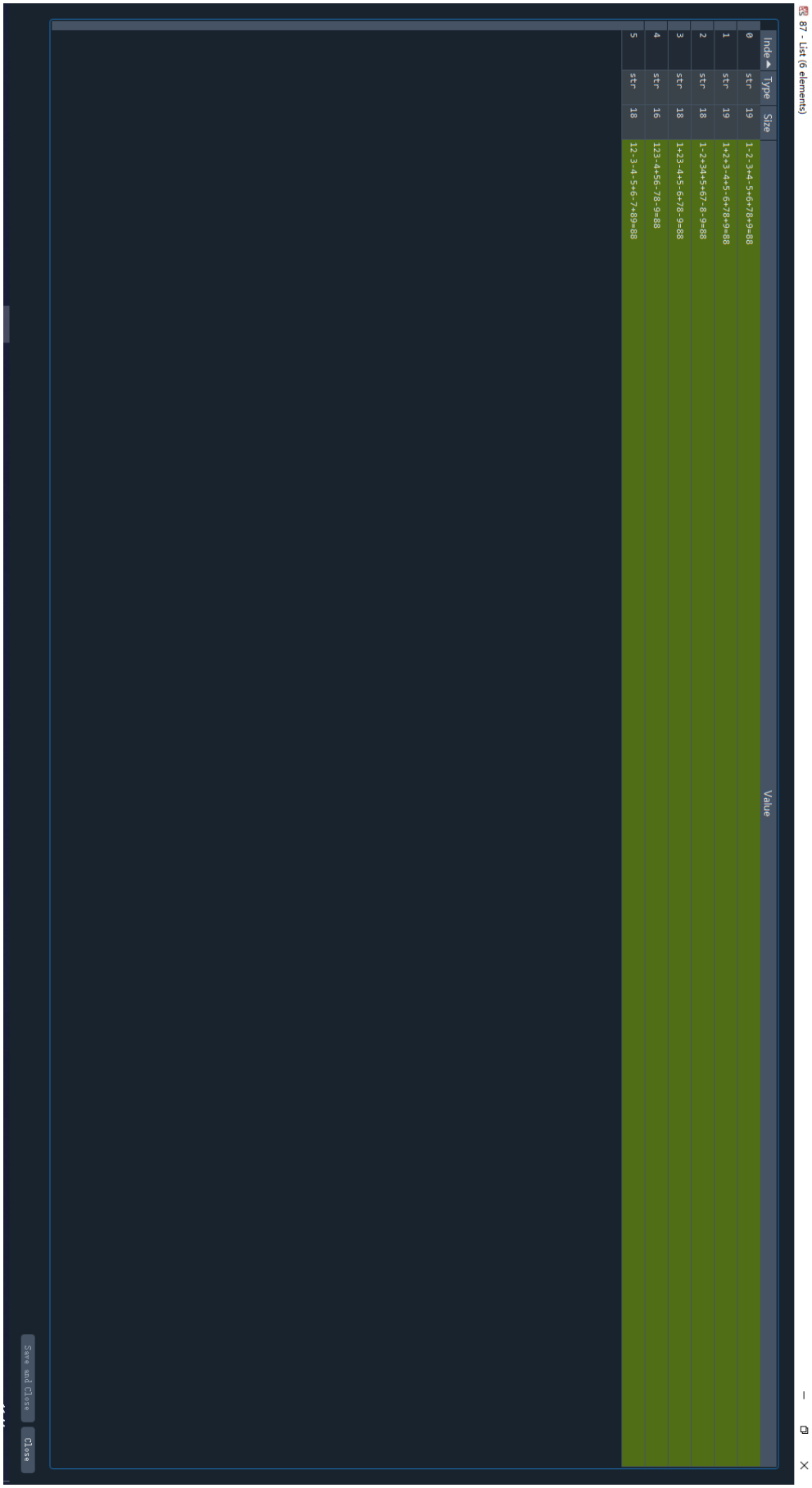

93 list 11 ['123-45+6-7+8+9=94', '1+23+4+56-7+8+9=94', '12-3-4+5+67+8+9=94', '1+2 ...
94 list 10 ['123+4-56+7+8+9=95', '1-2+3+4+5+67+8+9=95', '12+3+4-5-6+78+9=95', '1- ...
95 list 11 ['123-45-6+7+8+9=96', '12+34+56-7-8+9=96', '1-2+34-5+67-8+9=96', '1-2+ ...
96 list 7 ['1-2+34+56+7-8+9=97', '12+3-4+5-6+78+9=97', '1-2+3+45+67-8-9=97', '1- ...
97 list 9 ['12+3+4-5+67+8+9=98', '1-2-3+4+5+6+78+9=98', '1+2+3+4-5+6+78+9=98', ' ...
98 list 17 ['1+23+45+6+7+8+9=99', '12+3+4+56+7+8+9=99', '1-2+34+56-7+8+9=99', '1+ ...
99 list 11 ['1+23-4+56+7+8+9=100', '12+3-4+5+67+8+9=100', '1+2+34-5+67-8+9=100', ...
Save and Close
Close

maximum


0 - List (26 elements)
Inde▲
Type
Size
Value
0 str 17 12-34+5-6+7+8+9=1
1 str 17 1-2+34-56+7+8+9=1
2 str 19 1-2+3-4+5-6-7+8+9=1
3 str 19 1+2+3-4-5-6-7+8+9=1
4 str 16 12+34+5-67+8+9=1
5 str 17 1+2+3+45-67+8+9=1
6 str 18 1-234+5+6+7-8+9=1
7 str 19 1-2+3-4-5+6+7-8+9=1
8 str 19 1+2+3+4-5-6+7-8+9=1
9 str 19 1+2+3-4+5+6-7-8+9=1
10 str 19 1-2+3+4-5+6-7-8+9=1
11 str 16 1-234+5+67-8+9=1
12 str 19 1+2+3-4+5+6+7+8+9=1
13 str 19 1-2+3+4-5+6+7+8+9=1
14 str 19 1-2+3-4+5+6-7+8+9=1
15 str 19 1+2+3+4+5-6-7+8+9=1
16 str 18 1+234-5-6-7+8-9=1
17 str 16 1+2345-67+8-9=1
18 str 19 1-2+3+4+5+6+7-8+9=1
19 str 19 1+2+3+4-5+6+7-8+9=1
20 str 17 1+2-34+56-7-8+9=1
21 str 17 1-2+3-45+67-8-9=1
22 str 16 1-23+4-5-67+89=1
23 str 15 1+23-45-67+89=1
24 str 16 1+2344-5+67-89=1
25 str 15 1-2345+67-89=1
Save and Close
Close


44 - List (26 elements)
Inde
Type
Size
Value
0 str 20 1+2+3+4+5+6+7+8+9=45
1 str 19 1+23-4-5+6+7+8+9=45
2 str 18 1-2-34+56+7+8+9=45
3 str 18 12+34-5-6-7+8+9=45
4 str 19 1-2-3+45-6-7+8+9=45
5 str 18 1+2+3-45+67+8+9=45
6 str 19 1+2-3+45+6-7-8+9=45
7 str 18 1-23+4-5+67-8+9=45
8 str 18 1+2-34-5-6+78+9=45
9 str 17 12-3-45-6+78+9=45
10 str 19 1+23+4+5+6+7+8-9=45
11 str 19 1+2-3+45-6+7+8-9=45
12 str 19 1-2+3+45+6-7+8-9=45
13 str 18 1-23-4+5+67+8-9=45
14 str 17 1+23-45+67+8-9=45
15 str 18 12-3+4+56-7-8-9=45
16 str 19 1-2-3+4-5+67-8-9=45
17 str 18 1-2-34+5+6+78-9=45
18 str 17 12+3-45+6+78-9=45
19 str 18 1+2-3-45-6+7+89=45
20 str 17 12-3-4-56+7+89=45
21 str 18 1-2+3-45+6-7+89=45
22 str 18 1-23-4-5-6-7+89=45
23 str 17 12+3+4-56-7+89=45
24 str 17 1+23+4-5-67+89=45
25 str 16 1-23+45-67+89=45
Save and Close
Close

minimum


87 - List (6 elements)
Index
Type
Size
Value
0
str
19
1-2-3+4-5+6+78+9=88
1
str
19
1+2+3-4+5-6+78+9=88
2
str
18
1-2+34+5+67-8-9=88
3
str
18
1+23-4+5-6+78-9=88
4
str
16
123-4+56-78-9=88
5
str
18
12-3-4-5+6-7+89=88
Save and Close
Close