MAGIC SQUARE
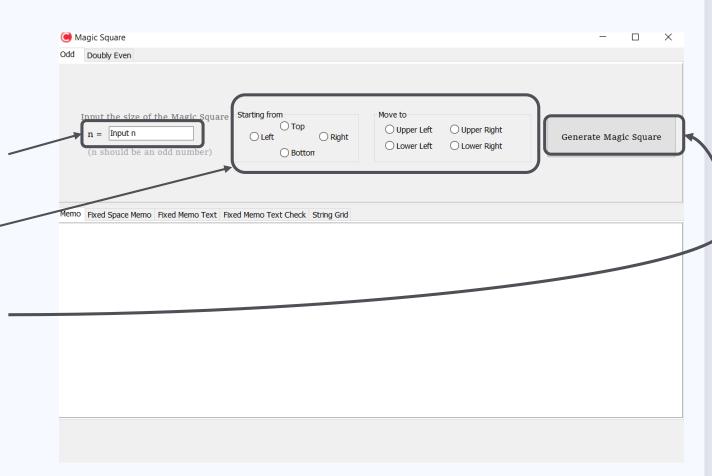
資財系 109705011陳盈均

MAGIC SQUARE IN ODD ORDER

The sums of the numbers in each row, each column, and both main diagonals are the same.

USER INTERFACE

- Input n to set the magic square to n-order. (3 <= n <= 21)

- Choose where you want the numbers start to fill in and the moving direction

- Press the button to generate the magic square!

MAGIC SQUARE GENERATED (EX: N = 5)

Magic Square 5x5 printed in Memo

Memo	Fixed Space Memo	Fixed Memo Text	Fixed Memo Text Check	String Grid

```
< Magic Square 5x5 >
15 8 1 24 17
16 14 7 5 23
22 20 13 6 4
3 21 19 12 10
9 2 25 18 11
```

Simply print it out

in Fixed Memo Text

Memo	Fixed Space Memo	Fixed Memo Text	Fixed Memo Text Check	String Grid

```
< Magic Square 5x5 >
  15    8    1   24   17
  16   14    7    5   23
  22   20   13    6    4
   3   21   19   12   10
   9    2   25   18   11
```

The font Consolas makes the square printed looks very neat

in Fixed Space Memo

Memo	Fixed Space Memo	Fixed Memo Text	Fixed Memo Text Check	String Grid

```
< Magic Square 5x5 >
 15  8  1 24 17
 16 14  7  5 23
 22 20 13  6  4
  3 21 19 12 10
  9  2 25 18 11
```

Spaced the number in the Magic Square evenly, but since the characters don't have the same width, it doesn't look neat

with Sum Check

Memo	Fixed Space Memo	Fixed Memo Text	Fixed Memo Text Check	String Grid

```
< Magic Square 5x5 >
  15    8    1   24   17  -65
  16   14    7    5   23  -65
  22   20   13    6    4  -65
   3   21   19   12   10  -65
   9    2   25   18   11  -65
 |65  |65  |65  |65  |65   \65   /65
```

The sums of each row, column, and the main diagonals are represented.

MAGIC SQUARE GENERATED (EX: N = 5)

in StringGrid

Memo	Fixed Space Memo	Fixed Memo Text	Fixed Memo Text Check	String Grid	
15	8	1	24	17	- 65
16	14	7	5	23	- 65
22	20	13	6	4	- 65
3	21	19	12	10	- 65
9	2	25	18	11	- 65
| 65	| 65	| 65	| 65	| 65	\65 /65

Magic Square and the sums are represented in the StringGrid.

Those cells with sums are in light blue.

IF YOU FORGET TO CHECK THE BUTTON