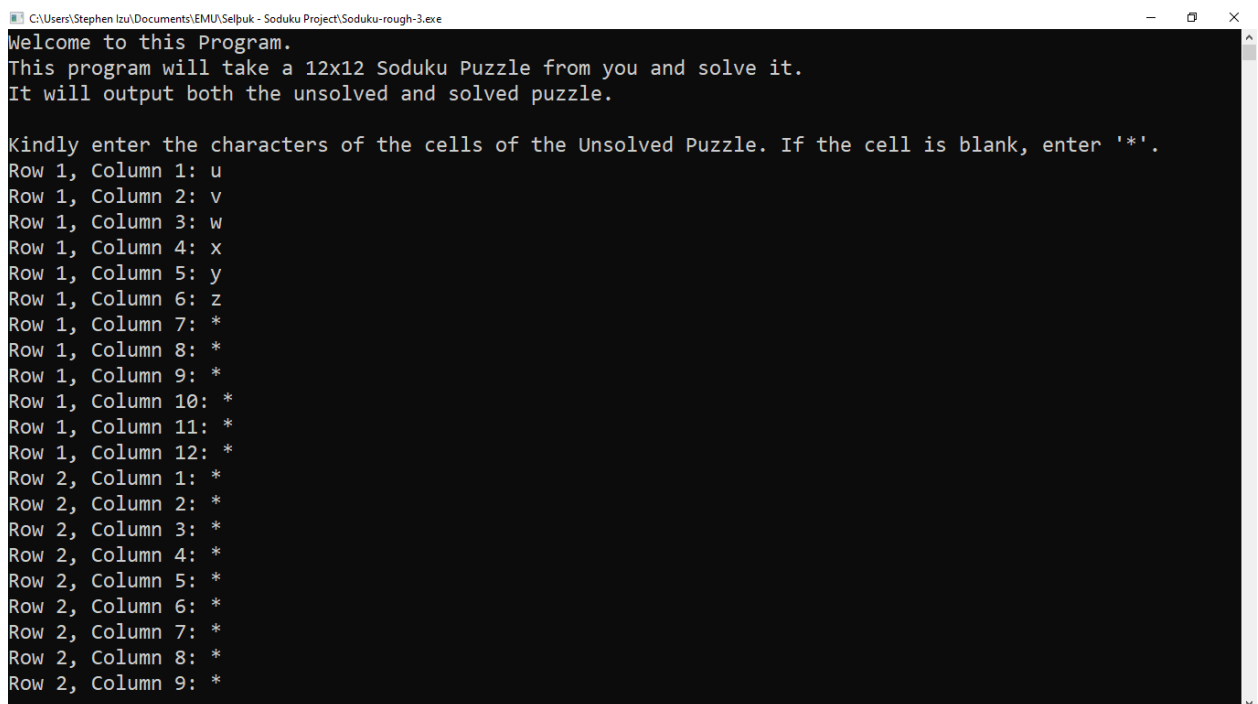


# SIMULATION

Based on the code syntax, the program was tested by inputting random values as shown in the figures below. The results were astounding.

KINDLY NOTE THAT THE C PROGRAM PERFORMS AN EXTRA FUNCTION OF CONVERTING INPUT LOWERCASE LETTERS TO UPPERCASE



```
C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe
Welcome to this Program.
This program will take a 12x12 Soduku Puzzle from you and solve it.
It will output both the unsolved and solved puzzle.

Kindly enter the characters of the cells of the Unsolved Puzzle. If the cell is blank, enter '*'.
Row 1, Column 1: u
Row 1, Column 2: v
Row 1, Column 3: w
Row 1, Column 4: x
Row 1, Column 5: y
Row 1, Column 6: z
Row 1, Column 7: *
Row 1, Column 8: *
Row 1, Column 9: *
Row 1, Column 10: *
Row 1, Column 11: *
Row 1, Column 12: *
Row 2, Column 1: *
Row 2, Column 2: *
Row 2, Column 3: *
Row 2, Column 4: *
Row 2, Column 5: *
Row 2, Column 6: *
Row 2, Column 7: *
Row 2, Column 8: *
Row 2, Column 9: *
```

C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe

```
Row 2, Column 8: *
Row 2, Column 9: *
Row 2, Column 10: *
Row 2, Column 11: *
Row 2, Column 12: *
Row 3, Column 1: *
Row 3, Column 2: *
Row 3, Column 3: *
Row 3, Column 4: *
Row 3, Column 5:
*
Row 3, Column 6: *
Row 3, Column 7: *
Row 3, Column 8: *
Row 3, Column 9: *
Row 3, Column 10: *
Row 3, Column 11: *
Row 3, Column 12: *
Row 4, Column 1: Q
Row 4, Column 2: R
Row 4, Column 3: S
Row 4, Column 4: T
Row 4, Column 5: *
Row 4, Column 6: *
Row 4, Column 7: *
Row 4, Column 8: *
```

C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe

```
Row 4, Column 7: *
Row 4, Column 8: *
Row 4, Column 9: *
Row 4, Column 10: *
Row 4, Column 11: *
Row 4, Column 12: *
Row 5, Column 1: *
Row 5, Column 2: *
Row 5, Column 3: *
Row 5, Column 4: A
Row 5, Column 5: B
Row 5, Column 6: C
Row 5, Column 7: D
Row 5, Column 8: *
Row 5, Column 9: *
Row 5, Column 10: *
Row 5, Column 11: E
Row 5, Column 12: F
Row 6, Column 1: *
Row 6, Column 2: *
Row 6, Column 3: *
Row 6, Column 4: *
Row 6, Column 5: *
Row 6, Column 6: *
Row 6, Column 7: *
Row 6, Column 8: *
```

C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe

```
Row 6, Column 7: *
Row 6, Column 8: *
Row 6, Column 9: *
Row 6, Column 10: *
Row 6, Column 11: *
Row 6, Column 12: *
Row 7, Column 1: *
Row 7, Column 2: *
Row 7, Column 3: *
Row 7, Column 4: *
Row 7, Column 5: *
Row 7, Column 6: *
Row 7, Column 7: *
Row 7, Column 8: *
Row 7, Column 9: *
Row 7, Column 10: *
Row 7, Column 11: *
Row 7, Column 12: *
Row 8, Column 1: *
Row 8, Column 2: *
Row 8, Column 3: *
Row 8, Column 4: *
Row 8, Column 5: *
Row 8, Column 6: *
Row 8, Column 7: *
Row 8, Column 8: *
```

C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe

```
Row 8, Column 7: *
Row 8, Column 8: *
Row 8, Column 9: *
Row 8, Column 10: *
Row 8, Column 11: *
Row 8, Column 12: *
Row 9, Column 1: *
Row 9, Column 2: *
Row 9, Column 3: *
Row 9, Column 4: *
Row 9, Column 5: *
Row 9, Column 6: *
Row 9, Column 7: *
Row 9, Column 8: *
Row 9, Column 9: *
Row 9, Column 10: *
Row 9, Column 11: *
Row 9, Column 12: *
Row 10, Column 1: *
Row 10, Column 2: *
Row 10, Column 3: *
Row 10, Column 4: *
Row 10, Column 5: *
Row 10, Column 6: *
Row 10, Column 7: *
Row 10, Column 8: *
```

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```
Row 10, Column 7: *
Row 10, Column 8: *
Row 10, Column 9: *
Row 10, Column 10: *
Row 10, Column 11: *
Row 10, Column 12: *
Row 11, Column 1: *
Row 11, Column 2: *
Row 11, Column 3: *
Row 11, Column 4: *
Row 11, Column 5: *
Row 11, Column 6: *
Row 11, Column 7: *
Row 11, Column 8: *
Row 11, Column 9: *
Row 11, Column 10: *
Row 11, Column 11: *
Row 11, Column 12: *
Row 12, Column 1: *
Row 12, Column 2: *
Row 12, Column 3: *
Row 12, Column 4: *
Row 12, Column 5: *
Row 12, Column 6: *
Row 12, Column 7: *
Row 12, Column 8: *
```

C:\Users\Stephen Izu\Documents\EMU\Selpuk - Soduku Project\Soduku-rough-3.exe

```
Row 12, Column 7: *
Row 12, Column 8: *
Row 12, Column 9: *
Row 12, Column 10: *
Row 12, Column 11: *
Row 12, Column 12: *
```

Thank you for trusting us to solve the puzzle.

UNSOLVED PUZZLE

```
+---+---+
| U V W X | Y Z * * | * * * * |
| * * * * | * * * * | * * * * |
| * * * * | * * * * | * * * * |
+---+---+
| Q R S T | * * * * | * * * * |
| * * * A | B C D * | * * E F |
| * * * * | * * * * | * * * * |
+---+---+
| * * * * | * * * * | * * * * |
| * * * * | * * * * | * * * * |
| * * * * | * * * * | * * * * |
+---+---+
| * * * * | * * * * | * * * * |
| * * * * | * * * * | * * * * |
| * * * * | * * * * | * * * * |
```

*	*	*	*
*	*	*	*
*	*	*	*
*	*	*	*

## SOLVED PUZZLE

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