

# Modified SOS Game

## Problem Statement :

You have to implement a 2 player SOS game in a  $N \times N$  board using python. This game is a modified form of the standard SOS game. Size of board will be given as input by the player prior to the game

The game will have the flow as:

1. Each player will have to choose a distinct character. (Say 1st player- "L", 2<sup>nd</sup> player- "O").
2. At the start of a player's turn, the player chooses either their distinct character or "S as the character they want to play.
3. They then select a location on the board to place their character on. Goal of both the players is to make the maximum of S\_S combination, where the character in the middle denotes the player's character (viz, for the 1<sup>st</sup> player making "SLS" combination and for the 2<sup>nd</sup> player making SOS).
4. Combinations can be in row, column or in diagonal
5. If any player by chance makes the opponent's combination, then a point will be rewarded to the opponent.
6. The game will continue until the complete board is filled up.
7. At last, the one with the maximum score/combination wins the game.

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SAKSHI's choice : L    Score of  SAKSHI :  0
SAHIL's choice : O    Score of  SAHIL :  0
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```
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| X | 1 | 2 | 3 |
| 1 | _ | _ | _ |
| 2 | _ | _ | _ |
| 3 | _ | _ | _ |
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```

```
-----
Your Move SAKSHI :
Enter row number : 
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```
-----
SAKSHI's choice : L    Score of  SAKSHI :  0
SAHIL's choice : O    Score of  SAHIL : 10
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```

```
-----
| X | 1 | 2 | 3 |
| 1 | S | _ | _ |
| 2 | _ | O | _ |
| 3 | _ | _ | S |
-----
```

```
-----
Your Move SAHIL :
Enter row number : 
```

```
-----
SAKSHI's choice : O    Score of  SAKSHI :  0
SAHIL's choice : L    Score of  SAHIL :  0
-----
```

```
-----
| X | 1 | 2 | 3 |
| 1 | _ | _ | _ |
| 2 | _ | _ | _ |
| 3 | _ | _ | _ |
-----
```

```
-----
Your Move SAKSHI :
Enter row number : 1
Enter column number : 
```

.....And so on until the board is completely filled.

-----  
SAKSHI's choice : L      Score of SAKSHI : 20  
SAHIL's choice : 0      Score of SAHIL : 40  
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X	1	2	3
1	S	L	S
2	0	0	L
3	S	0	S
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SAHIL   you won!!!

GAME OVER