

## Guessing Game

Guessing Game is a two players game where player 1 enters a 4-digit number and player 2 needs to guess the number entered by player 1.

The steps to be followed in order to play this game are as follows:

1. In order to start the game, the reset i.e. SW7 needs to be moved from off position to on position.
2. Now PL1 is displayed on the display.
3. PL1 can now enter the number using the switches SW0 to SW3, and buttons BTN0 to BTN3.
4. PL1 enters a four-digit number, BTN0 adds 1 to the digit, BTN1 adds 2 to the digit, BTN2 adds 4 to the digit, and BTN3 adds 8 to the digit.
5. After PL1 has finished entering the number, PL2 can start pushing in a number by moving the switch (SW4) from off position to on position.
6. PL2 now enters a number using the same buttons and switches, having the same values.
7. After entering the value, PL2 can guess whether the number entered is correct or not using, SW5.
8. If the number entered is low, then the display would show 2LO, else if the number entered by PL2 is high, then 2HI gets displayed.
9. PL2 can enter number as many times he wishes to, and make a guess using the switch SW5.
10. Now, if PL2 enters a correct number, then PL2 wins the game, and the LEDs start blinking.
11. The count of number of guesses made by PL2 gets displayed.
12. Now, in order to start the game again, first and last button needs to be pressed simultaneously.
13. Now PL1 gets displayed, and new game can be started again.

In this manner, guessing game is played.