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Mock Interview 1

Given a sorted array. Write a function that creates a Balanced Binary Search Tree using array elements.

Examples:

```
Input:  Array {1, 2, 3}
Output: A Balanced BST
      2
    /  \
   1    3


Input: Array {1, 2, 3, 4}
Output: A Balanced BST
      3
    /  \
   2    4
  /
 1
```

Given a matrix where every element is either 'O' or 'X', replace 'O' with 'X' if surrounded by 'X'. A 'O' (or a set of 'O') is considered to be by surrounded by 'X' if there are 'X' at locations just below, just above, just left and just right of it.

Examples:

```
Input: mat[M][N] =  {{'X', 'O', 'X', 'X', 'X', 'X'},
                     {'X', 'O', 'X', 'X', 'O', 'X'},
                     {'X', 'X', 'X', 'O', 'O', 'X'},
                     {'O', 'X', 'X', 'X', 'X', 'X'},
                     {'X', 'X', 'X', 'O', 'X', 'O'},
                     {'O', 'O', 'X', 'O', 'O', 'O'},
                    };
Output: mat[M][N] =  {{'X', 'O', 'X', 'X', 'X', 'X'},
                     {'X', 'O', 'X', 'X', 'X', 'X'},
                     {'X', 'X', 'X', 'X', 'X', 'X'},
                     {'O', 'X', 'X', 'X', 'X', 'X'},
                     {'X', 'X', 'X', 'O', 'X', 'O'},
                     {'O', 'O', 'X', 'O', 'O', 'O'},
                    };
```