Consider a square grid. Define $L_j$ as the piece of the grid consisting of the entries in row $j$ from column $j$ onwards, along with the entries in column $j$ from row $j$ onwards. For example, $L_1$ consists of the entire first row and first column.

Define a square grid as **indigo** if
(a) for each $j$ the entries in $L_j$ are the same; and
(b) the entries in successive $L_j$ are strictly increasing with $j$.

For example the following grids are indigo:

\[
\begin{array}{cccc}
1 & 1 & 1 & 1 \\
1 & 2 & 2 & 2 \\
1 & 2 & 3 & 3 \\
1 & 2 & 3 & 4 \\
\end{array}
\quad \text{and} \quad
\begin{array}{cccc}
2 & 2 & 2 \\
2 & 7 & 7 \\
2 & 7 & 9 \\
\end{array}
\]

Write a MATLAB function `indigo` that takes a square grid of numbers and returns a logical value as to whether the grid is indigo or not.

---

Sample runs:

```matlab
>> X = [ 2 2 2; 2 4 4; 2 4 5 ]
X =
     2     2     2
     2     4     4
     2     4     5
>> indigo( X )
ans =
    logical
   1
```

```matlab
>> X = [ 1 2 3; 1 2 3; 1 2 3 ]
X =
     1     2     3
     1     2     3
     1     2     3
>> indigo( X )
ans =
    logical
   0
```

```matlab
>> X = [ 1 2 3; 2 2 2; 2 2 2 ]
X =
     2     2     2
     2     2     2
     2     2     2
>> indigo( X )
ans =
    logical
   0
```