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## ***Operating Systems-2***

### ***Project Discussion***

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➤ ***Project Idea: Make a square***

➤ ***Project ID: (3)***

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**Under Supervision of:**  
**DR/Mohammed El-Said**  
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## **The Idea:**

Make a square with size 4X4 by using 4 or 5 pieces. The pieces can be rotated or flipped and all pieces should be used to form a square.

## **Input:**

The first line contains number of pieces. Each piece is then specified by listing a single line with two integers, the number of rows and columns in the piece, followed by one or more lines which specify the shape of the piece. The shape specification consists of 0 or 1 characters, with the 1 character indicating the solid shape of the puzzle (the 0 characters are merely placeholders). For example, piece A above would be specified as follows:

```
2 3
111
101
```

## **Output:**

Your program should report all solution, in the format shown by the examples below. A 4-row by 4-column square should be created, with each piece occupying its location in the solution. The solid portions of piece #1 should be replaced with `1' characters, of piece #2 with `2' characters.

Sample output that represents the figure above could be:

```
1112
1412
3422
3442
```

For cases which have no possible solution simply report "No solution possible".