## **CS6102**– Computational Thinking

Week -5

<u>14 – Dec -2022</u>

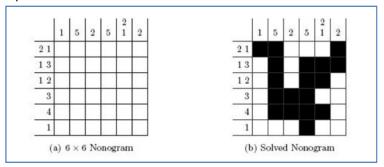
# More Puzzles - Nonograms, word search

## Nonograms

Nonogram is a logic puzzle with simple rules and challenging solutions.

The rules are

- ✓ You have a grid of squares, which must be either filled in black or marked with X.
- ✓ Beside each row of the grid are listed the lengths of the runs of black (or X mark) squares on that row.
- ✓ Above each column are listed the lengths of the runs of black (or X mark) squares in that column.
- ✓ Your aim is to find all black (or X mark) squares.
- ✓ An example is shown here



## <u>Q-1:</u>

|       | 2 | 1 |   | 3 |   | 2 |   | 1 | 1 | 1 |
|-------|---|---|---|---|---|---|---|---|---|---|
|       | 2 | 1 | 1 | 2 | 9 | 4 | 5 | 5 | 5 | 5 |
| 1 4 3 |   |   |   |   |   |   |   |   |   |   |
| 2 3   |   |   |   |   |   |   |   |   |   |   |
| 2     |   |   |   |   |   |   |   |   |   |   |
| 1     |   |   |   |   |   |   |   |   |   |   |
| 2     |   |   |   |   |   |   |   |   |   |   |
| 2 7   |   |   |   |   |   |   |   |   |   |   |
| 1 7   |   |   |   |   |   |   |   |   |   |   |
| 6     |   |   |   |   |   |   |   |   |   |   |
| 1 4   |   |   |   |   |   |   |   |   |   |   |
| 4     |   |   |   |   |   |   |   |   |   |   |

# <u>Q-2:</u>

|     | _ |     |       |   |   |   |   |   |       | _ |
|-----|---|-----|-------|---|---|---|---|---|-------|---|
|     | 2 | 2 5 | 3 3 1 | 4 | 4 | 2 | 2 | 2 | 7     | 7 |
| 7   |   |     |       |   |   |   |   |   |       |   |
| 9   |   |     |       |   |   |   |   |   |       |   |
| 3 2 |   |     |       |   |   |   |   |   |       |   |
| 2 2 |   |     |       |   |   |   |   |   |       |   |
| 2   |   |     |       |   |   |   |   |   | 9 - S |   |
| 3 2 |   |     |       |   |   |   |   |   |       |   |
| 4 4 |   |     |       |   |   |   |   |   |       |   |
| 3 2 |   |     |       |   |   |   |   |   |       |   |
| 1 1 |   |     |       |   |   |   |   |   |       |   |
| 3   |   |     |       |   |   |   |   |   |       |   |

**Qn 3:** 

|         | 3 | 2 | 1,5 | 2, 2, 1 | 4 | 2, 2, 1 | 1,5 | 2 | 3 |
|---------|---|---|-----|---------|---|---------|-----|---|---|
| 1,1     |   |   |     |         |   |         |     |   |   |
| 1,1     |   |   |     |         |   |         |     |   |   |
| 4       |   |   |     |         |   |         |     |   |   |
| 2,1,2   |   |   |     |         |   |         |     |   |   |
| 9       |   |   |     |         |   |         |     |   |   |
| 1,5,1   |   |   |     |         |   |         |     |   |   |
| 1,1,1,1 |   |   |     |         |   |         |     |   |   |
| 1,1     |   |   |     |         |   |         |     |   |   |

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## Q4: Find atleast 20 words in the word search grid given below

Note: Words can appear horizontally, vertically or diagonally, running backwards or forwards. Different words can cross and overlap.

XATNYSNPRABVBAS TEEHSDAERPSLYUG SOQGKNSSCOKLPSN OCHMACAECETEEE FYASARNPRRRHFAK JENNGOASCOSPRR WJNKIEWTOHUL AEXNTEEMSROWLHW RBEFRNPRFIET EGIAEUSECURITYE SHHETCWHISASAHN SSRESCRIPTWP TKU X C R E M M A P S R Y A U R Q SREVRESAVEPMSSQ SOCIALWUEVSUYBB