**Play fair cipher**

In play fair cipher letters arranged in a 5 \* 5 grid. One letter from the alphabet series is omitted.

Most of the times this letter is J.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | D | E |
| F | G | H | I | K |
| L | M | N | O | P |
| Q | R | S | T | U |
| V | W | X | Y | Z |

To encode a message, the user breaks the message into 2 letter chunks

Step 1: Let’s say according to our game scope – The Nazi leadership wants to convey their fighter planes that they want to bomb “Newcastle”. They would break Newcastle into

NE WC AS TL EX since it didn’t have even number of letters X was added.

Step 2: NE forms two corners of the rectangle hence it will be encoded to “PC”.

Step 3: WC similarly will be encoded to “XB”.

Step 4: AS will be encoded to “CQ”.

Step 5: TL will be encoded to “OQ”.

Step 6: EX will be encoded to “CZ”.

This way the whole message will be encoded.

Probably this technique requires time to solve so this can be used at later stages or at higher difficulty levels.