TECHNOPHILE BUD

Python TASK - 2

## Part_A: Pokémon Training Game

**Problem :**

You are a Pokémon trainer. Each Pokémon has its own power, described by a positive integer value. As you travel, you watch Pokémon and you catch each of them. After each catch, you have to display maximum and minimum powers of Pokémon caught so far. You must have linear time complexity. So sorting won't help here. Try having minimum extra space complexity.

**Examples:**

Suppose you catch Pokémon of powers 3 8 9 7. Then the output should be

3 3

3 8

3 9

3 7

## Part_B: Mastermind Game

Given the present generation's acquaintance with gaming and its highly demanded technology, many aspire to pursue the idea of developing and advancing it further. Eventually, everyone starts at the beginning. Mastermind is an old code-breaking game played by two players. The game goes back to the 19th century and can be played with paper and pencil.

**Rules of the game**

Two players play the game against each other; let's assume Player 1 and Player 2.

- Player 1 plays first by setting a multi-digit number.
- Player 2 now tries his first attempt at guessing the number.
- If Player 2 succeeds in his first attempt (despite odds which are highly unlikely) he wins the game and is crowned Mastermind! If not, then Player 1 hints by revealing which digits or numbers Player 2 got correct.
- The game continues till Player 2 eventually is able to guess the number entirely.
- Now, Player 2 gets to set the number and Player 1 plays the part of guessing the number.
- If Player 1 is able to guess the number within a lesser number of tries than Player 2 took, then Player 1 wins the game and is crowned Mastermind.
- If not, then Player 2 wins the game.
- The real game, however, has proved aesthetics since the numbers are represented by color-coded buttons.

**For example:**

**Input:**

Player 1, set the number: 5672

Player 2, guess the number: 1472

**Output:**

Not quite the number. You did get 2 digits correct.

X X 7 2

Enter your next choice of numbers:

Upload your complete code on GitHub by the name, **Task_2; Part_A** & **Part_B**.

Current Day: **Monday**

Submission Day; **Sunday**

(We are strict with the Deadlines so try to submit in the given stipulated time i.e. by Sunday till 12:00 PM)