## Game Rules

* **Codebreaker** is a logic game in which a code-breaker tries to break a **secret code** created by a code-maker. The **codemaker**, which will be played by the application we’re going to write, creates a secret code of **four numbers** between **1 and 6.**
* The codebreaker **gets** some number of chances to break the code (depends on chosen difficulty). In each turn, the **codebreaker** makes a guess of **4** numbers. The **codemaker** then marks the guess with up to 4 signs - **+** or **-** or **empty spaces**.
* A **+** indicates an exact match: one of the numbers in the guess is the same as one of the numbers in the secret code and in the same position. For example:

**Secret number** - 1234

**Input number** - 6264

**Number of pluses** - 2 (second and fourth position)

* A **-** indicates a number match: one of the numbers in the guess is the same as one of the numbers in the secret code but in a different position. For example:

**Secret number** - 1234

**Input number** - 6462

**Number of minuses** - 2 (second and fourth position)

* An empty space indicates that there is not a current digit in a secret number.
* If **codebreaker** inputs the exact number as a secret number - **codebreaker** wins the game. If all attempts are spent - codebreaker loses.
* **Codebreaker** also has some number of hints(depends on chosen difficulty). If a user takes a hint - he receives back a separate digit of the secret code.