Unlock to Future was a rising star in the security industry, known for its cutting-edge technology and innovative designs. Their latest project was a digital lock that promised to revolutionize the industry with its advanced security features and sleek design. As the company's employee, you are assigned tasks to implement the functionalities.

**Component Specification: Lock**

| **Type(Class)** | **Attributes** | **Methods** |
| --- | --- | --- |
| **Lock** | String lockModel  int codeLength  int[] code  String lockState | Necessary getters, setters and a four-argument constructor are provided as a part of the code skeleton. |

**Functional Requirement 1: Extract the details of the Lock and create an object of the Lock.**

| **Type(Class)** | **Method** | **Responsibility** |
| --- | --- | --- |
| **UserInterface** | public static Lock **extractDetails**(String lockDetails) | This method accepts **lockDetails**as an argument and should extract the properties of the **Lock**from the argument by parsing the **lockDetails and s**et these values to the **Lock**object and return this object |

**Functional Requirement 2: Get the code from the user to unlock the lock.**

| **Type(Class)** | **Methods** | **Responsibilities** |
| --- | --- | --- |
| Lock | public String enterCodeToUnlock(int[] codeAttempts) | This method should accept an integer array, codeAttempts as an argument.and compares the input codeAttempts to the code stored.  If the lockState is locked, then check for the code and codeAttempts.  If the code and codeAttempts are equal, then set lockState as unlocked and return "Code correct. Lock is now unlocked."  If the code and codeAttempts are not equal, return "Incorrect code. Please try again."  If the lockState is unlocked, then return "Lock is already unlocked."  ***Condition:***   * ***lockState****is case-insensitive.* * *Assume the minimum codeLength must be 1.* |

**Note:**

* In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.
* Ensure to follow the object-oriented specifications provided in the question
* Ensure to provide the names for classes, attributes, and methods as specified in the question.
* Adhere to the code template, if provided.

**Sample Input / Output 1**

Enter the details

**NL9805:3:9:0:0:Locked**

Enter the code attempts of length 3

**9**

**0**

**0**

Lock Model: NL9805

Code Length: 3

Lock State Unlocked

Code correct. Lock is now unlocked.

**Sample Input / Output 2**

Enter the details

**NL1201:4:1:5:9:8:Locked**

Enter the code attempts of length 4

**1**

**2**

**3**

**4**

Incorrect code. Please try again.

**Sample Input / Output 3**

Enter the details

**NL9809:5:1:4:7:9:6:Unlocked**

Lock is already unlocked.