

Link Codeboard Cohort A : <https://codeboard.io/projects/376401>

Link Codeboard Cohort B : <https://codeboard.io/projects/376405>

**Deadline: 21 November 2022 Pukul 1 Siang**

### **Task 1 (Guided):**

To save space and in turn the paper, the information printed on the boarding pass is shortened. For instance the text printed on the boarding pass may look like this:

**Rahman Arif/17-02-2003/Jakarta/M/A/WNI/Single**

However, the airways crew needs detailed information about their passengers. Therefore, they need a computer program to convert the shortened version to the detailed version. The on screen output should be something like below:

```
Full Name: Arif Rahman (AR)
Age: 20
City of Birth: Jakarta
Sex: Male
Blood Type: A
Local Citizen: Yes
Marital Status: Single
```

As you may have already noticed, on the boarding pass printed seven pieces of information split by slash (/):

1. First part is the full name, last name followed by first name, the expected output is First name followed by last name and the initial within a bracket.
2. Second part is the birth date within format dd-mm-yyyy, whereas the expected output is the age of the passenger.
3. Third part is the place of birth and the expected output is just straightforward.
4. Fourth part is sex, i.e. M or F, whereas the expected output is Male or Female
5. Fifth part is blood type i.e. A, B, AB, O; and the expected output is just straightforward as it is.
6. Sixth part is the citizenship status, i.e. WNI or WNA whereas the expected output is Yes if the passenger is local citizen (WNI) or No otherwise
7. The last part is the marital status; and the expected output is just straightforward as it is.

Could you help with the java program to solve that problem?

**Please note that you are not allowed to use branching, looping, array or other advanced programming techniques, just use string manipulation methods only.**

## Task 2 (Semi-Guided)

Within the cyber security area, encryption is a key to secure data and information. One of the simplest methods to encrypt information is called **Caesar Cipher** method.

Given each alphabet from a-z is represented by numbers from 0 to 25 respectively, this method works simply by shifting the respected character **k** places to right. We call **k** as the secret key. For example if the key is **5**, the original text "**Ahmad**" with its representative numbers (0-7-12-0-3) will be encrypted to "**Fmrfi**" with its representative numbers (5-12-17-5-8).

Provided that the input is a string with exactly five characters and the key is 5, please create a java program to encrypt the input to the expected encrypted output text.

Below is example of input and the expected output:

**Input:**

Ahmad  
Zuhro

**Output:**

Fmrfi  
Ezmtw

Please note that you are not allowed to use branching, looping, array or other advanced programming techniques, just use string manipulation methods only.

### Task 3 (Unguided)

A **palindrome is** a word, number, phrase, or other sequence of symbols that reads the same backwards as forwards, such as the words **madam** or **racecar**.

Given an input of string with exactly 5 characters, could you help with the Java code to determine whether the input is Palindrome or not. Example of input and the expected output is below:

**Input:**

Kodok

**Output:**

Is Kodok Palindrome? Yes, It is

Another example:

**Input:**

Rumah

**Output:**

Is Rumah Palindrome? No, It isn't

Please note that you are not allowed to use branching, looping, array or other advanced programming techniques, just use string manipulation methods only.