

# Challenge 4: Find out if the Given Number is a Palindrome


Let's test our understanding by solving a difficult challenge in this lesson.

## We'll cover the following ^

- Problem statement
  - Input
  - Output
  - Sample input
  - Sample output
- Coding exercise

## Problem statement #

In this challenge, you are given a number. Your task is to find whether the given number is a palindrome or not.

 A number is a palindrome if it reads the same backward as forward, e.g., 1221.

## Input #

We have already initialized the variable `number` at the backend.

## Output #

- If the given `number` is a palindrome, then you should print `is palindrome` to the console.
- If the given `number` is not a palindrome, then you should print `not palindrome` to the console.

## Sample input #


```
int number = 212
```

## Sample output #

```
is palindrome
```

## Coding exercise #

Before diving directly into the solution, first, try to solve it yourself, and then check if your code passes all the test cases. If you get stuck, you can always see the given solution.

 Please use the variable `number` for the input and print your output to the console; otherwise, your code will not execute.

Good Luck! 

```
/* We have already declared the input variable number at the backend.  
int number;  
Find whether the given number is palindrome or not, and then  
print your output to the console  
*/  
// Write your code here
```



 Well done! If you have solved the problem, you are a pro in loops!

In case you are stuck, let's go over the solution review in the next lesson.