

## CS1020E | Lab 2 | Exercise 1

### Palindrome Integer

#### Problem Description

A palindrome integer is an integer number that has the same value when the digits are read in both directions. For example, the integer 12321 is a palindrome integer, but 1234567 is not.

Complete the given skeleton code in **Palindrome.cpp** to determine whether an input integer is a palindrome. Your program must output the reverse of the input integer before displaying whether the input is a palindrome. You are encouraged to add any necessary function definition to the program.

For this exercise, your program must not use any `string` object or array.

#### Inputs

The input is a positive integer without leading or trailing zeros, and its length is at most 9 digits.

#### Outputs

The first output is the reverse of the input integer. The second output is **Yes** if the input integer is a palindrome or **No** otherwise.

For the inputs as shown in the following sample runs, your program must produce exactly the same outputs, i.e. the white spaces and newlines must be at the same places.

#### Sample Run 1

```
12345678  
87654321  
No
```

(User inputs are shown in **bold red**.)

#### Sample Run 2

```
123454321  
123454321  
Yes
```

(User inputs are shown in **bold red**.)

## Submission

You need to submit only your completed **Palindrome.cpp** to CodeCrunch (<https://codecrunch.comp.nus.edu.sg/>) before the specified deadline. We will take only your latest submission.

Late submissions will not be accepted. The submission system in CodeCrunch will automatically close at the deadline.