**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.