Exercise #8 (second last)

import java.util.Scanner;

public class Exercise8 {

// the static main method

public static void main(String[] args){

Scanner sc = new Scanner(System.in);

// ask the user for the number

System.out.print("Enter the number: ");

int num = sc.nextInt();

// reverse the number

String reverse = reverseNum(num);

System.out.println("The reverse of the number is " + reverse);

sc.close();

}

// reverse the number

// the parameter is the number

// return the reverse of the number as a string

public static String reverseNum(int num){

String str = Integer.toString(num);

String reverse = "";

// reverse the string by adding the last character to the front

for (int i = 1; i <= str.length() ; i++){

reverse += str.charAt(str.length()-i);

}

return reverse;

}

}

Exercise #9 (last)

import java.util.Scanner;

public class Exercise9 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

// ask the user for the word

System.out.print("Enter the word: ");

String input = sc.nextLine();

// remove the spaces

String word = input.replaceAll("\\s", "");

// decide if the word is a palindrome

boolean answer = isPalindrome(word);

// display the result

if (answer) {

System.out.println(word + " is a palindrome.");

} else {

System.out.println(word + " is not a palindrome.");

}

sc.close();

}

// accepts the user's input

// and validate if it is a palindrome

// the parameter is the user's input

// return true if it is a palindrome

// return false if it is not a palindrome

public static boolean isPalindrome(String str) {

// reverse the string

String reverse = "";

for (int i = 1; i <= str.length() ; i++){

reverse += str.charAt(str.length()-i);

}

// compare the string and the reverse

// ignore case

return str.equalsIgnoreCase(reverse);

}

}