

## 1] Java Program to Check Palindrome String

The screenshot shows the Eclipse IDE with the following components:

- Package Explorer:** Displays the project structure. The 'src' package contains 'package-info.java', 'NumberPalindromeChecker.java', and 'PalindromeChecker.java'. The 'com.college.db' package contains 'sagar'.
- Editor:** Shows the code for 'PalindromeChecker.java'. The code is as follows:

```
1 package sagar;
2
3 public class PalindromeChecker {
4     public static void main(String[] args) {
5
6         String str = "Radar";
7         String reverseStr = "";
8
9         int strLength = str.length();
10
11         // Loop to reverse the string
12         for (int i = strLength - 1; i >= 0; --i) {
13             reverseStr += str.charAt(i);
14         }
15
16         // Check if the original string and reversed string are the same (ignoring case)
17         if (str.equalsIgnoreCase(reverseStr)) {
18             System.out.println(str + " is a Palindrome String.");
19         } else {
20             System.out.println(str + " is not a Palindrome String.");
21         }
22     }
23 }
24
```
- Task List:** Empty.
- Outline:** Shows the class 'sagar.PalindromeChecker' with the method 'main(String[]): void'.
- Console:** Shows the output: 'Radar is a Palindrome String.'

## 2] Java Program to Check Palindrome Number

The screenshot shows the Eclipse IDE with the following components:

- Package Explorer:** Displays the project structure. The 'src' package contains 'package-info.java', 'NumberPalindromeChecker.java', and 'PalindromeChecker.java'. The 'com.college.db' package contains 'sagar'.
- Editor:** Shows the code for 'NumberPalindromeChecker.java'. The code is as follows:

```
1 package sagar;
2
3 public class NumberPalindromeChecker {
4     public static void main(String[] args) {
5
6         int num = 3553;
7         int reversedNum = 0;
8         int remainder;
9
10        int originalNum = num;
11
12        // Reverse the number
13        while (num != 0) {
14            remainder = num % 10;
15            reversedNum = reversedNum * 10 + remainder;
16            num /= 10;
17        }
18
19        // Check if the number is a palindrome
20        if (originalNum == reversedNum) {
21            System.out.println(originalNum + " is a Palindrome.");
22        } else {
23            System.out.println(originalNum + " is not a Palindrome.");
24        }
25    }
26 }
27
```
- Task List:** Empty.
- Outline:** Shows the class 'sagar.NumberPalindromeChecker' with the method 'main(String[]): void'.
- Console:** Shows the output: '3553 is a Palindrome.'