

Sprint 5: Working with Looping Constructs

Practice Challenge - 5.1 – Swap Digits

Write a program in Java that accepts the integer 'n' and performs the following steps:

- If the total number of digits in the integer 'n' is even, swap the first and second digit, the third and fourth digit, the fifth and sixth digit, and so on.
- If the total number of digits in the integer 'n' is odd, then the first digit remains unchanged and swapping begins from the second digit.

For example, in the integer 564783, there are a total number of 6 digits. Here, the number 6 is an even number. The new integer after swapping this integer will be 657438.

However, in the integer 512364783, there are a total number of 9 digits. Here, the number 9 is an odd number. The new integer after swapping this integer will be 521637438. In this case, the first digit remains unchanged and the swap begins from the second digit.

Example

Sample Input:

```
Number = 564783L
```

Expected Output:

```
SwappedNumber = 657438L
```

Sample Input:

```
Number = 7564783L
```

Expected Output:

```
SwappedNumber = 7657438L
```

Practice Challenge - 5.1 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint5_pc5.1.git

Practice Challenge - 5.2 – Digital Calendar

A software company wishes to help its employees plan and execute their projects in a better manner. The employer intends to have a uniform system that allows the employees to check and fill the progress details of their project. The company plans to release a digital calendar that will display the days of the month on a screen that looks similar to an analog calendar. It will take the day, month and year as input from the user and display it on the calendar.

Points to remember:

1. Consider leap years while formulating the solution.
2. The calendar loop should display the days of the month and ensure that only 7 dates are displayed in one row. In order to check the same use the below condition while looping

```
((dayOfTheMonth + firstDayOfTheMonth)%7 == 0) || dayOfTheMonth == daysInMonth
```

```
Enter month(Press 1 for Jan, 2 for Feb, 12 for Dec.....):
8
Enter Year:
2020
Enter Day of week(Press 1 for Mon, 2 for Tue, 7 for Sun.....):
6

S M Tu W Th F S
                1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
```

Practice Challenge - 5.2 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint5_pc5.2.git