

Sprint 9: Working with Single Dimensional Array

Problem Statement : 9.1 - Unique Arrays

A company has revamped the health insurance policy for all its insured employees and has increased their health cover by 20%. The human resource department needs to collate the data of all insured employees and prepare a unique list of their employee ids in order to provide them this facility. Help the HR manager write a program to help the HR manager to create a unique list of employee ids to avoid duplication.

Sample Input :

```
int[] salesDepartmentEmpIds =
{101,105,106,107,108,109};
```

Sample Output:

```
true
```

Sample Input :

```
int[] accountDepartmentEmpIds =
{201,205,206,207,208,209,201};
```

Sample Output:

```
false
```

Practice Challenge – 9.1 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint9_pc9.1

Practice Challenge - 9.2 – Replacing Consecutive Pair of Integers with their Sum

Write a program to initialize an array of integers. Create a new array by adding every two consecutive elements from the start.

For example,

If the array length is even, then consecutive elements are added.

```
int[] inputArray = {6, 1, 9, 4, 7, 11, 2, 2, 12, 12}
```

First element = 6

Second element = 1

```
int [] outputArray = {7, 13, 18, 4, 24}
```

But, if the array length is odd, the consecutive elements till the second last element are added and then the last element is copied onto the outputArray.

```
int[] inputArray = {6, 1, 9, 4, 7, 11, 2, 2, 12}
```

```
int [] outputArray = {7, 13, 18, 4, 12}
```

Practice Challenge – 9.2 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint9_pc9.2

Practice Challenge - 9.3 – Medicine Tracker

A medicine tracker app helps Nancy keep track of the days on which she has to take her medicine. Her physician has asked her to take a multivitamin after every 5 days. The app reminds her the number of days left for the medicine to be taken. Even if she misses a dose, and takes it a day after the calculated day or two, she still has the option to re-enter the day on which she had taken the medicine and the app starts tracking the next 5 days cycle from that day.

NOTE: The gap between the current date and the expected date should be indicated by the number of days. Also, consider leap years in this solution.

Hint :

The current day can be a Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or a Sunday.

This must be represented as number 1 - Sunday, 2 - Monday, 3 - Tuesday, 4 - Wednesday, 5 - Thursday, 6 - Friday, and 7 - Saturday.

The gap between the current day and the expected date should be indicated with a number. Also, please consider leap years in this solution.

Sample Input:

```
Enter the day medicine is taken on : 7 (Saturday)
Next dose to be taken after : 4
```

Sample Output:

```
Your next dose should be taken on Wednesday
```

Practice Challenge – 9.3 – Boilerplate URL

https://myrepos.stackroute.niit.com/core_java_boilerplates/sprint9_pc9.3.git