

# Lab-2: Structured Programming in Java - II

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## Objectives

You will learn:

1. Declaring and initializing arrays
2. Comparing input to array elements.
3. Preventing array out-of-bounds errors

## Exercise

1. Create a method in java that given a vector of size 6, count the numbers of 2's that there is in the vector. Print the result.
2. Create a 1x8 vector of integers. Write a program with two methods; the first method finds the maximum value in the vector. The other method counts the even numbers in vector (hint: use Module operator %). Print all results.
3. Write an application that inputs 5 numbers, each between 10 and 100, inclusive. As each number is read, display it only if it's not a duplicate of a number already read. Display the complete set of unique values input after the user enters each new value. Use one array to store elements and function "investigar()" to prove the number is not in the array.

```
Enter number: 11
11
Enter number: 85
11 85
Enter number: 26
11 85 26
Enter number: 11
11 has already been entered
11 85 26
Enter number: 41
11 85 26 41
```

4. Write a program that will receive a value of an even positive integer "n" and will calculate and return the product of the even integers from 1 to n (print your result).Then, if the result is less than 5, print "menor que 5", otherwise print "mayor que 5". Use a "for" loop