

Assignment 2

Topic: Array

Sl. No.	Question
1.	Write a java program that will search a number from an array of 10 numbers.
2.	Write a java program that will sort an array of N inputted numbers.
3.	Write a java program that will read array of N numbers, and it will remove the duplicate numbers (if any) and display the array.
4.	<p>Java Program to Interchange Elements of First and Last in a Matrix Across Rows</p> <p>Input 1: 1 1 5 0 2 3 7 2 8 9 1 3 6 7 8 2</p> <p>Output 1: 6 7 8 2 2 3 7 2 8 9 1 3 1 1 5 0</p> <p>Input 2: 7 8 9 10 11 13 14 1 15 7 12 22 11 21 30 1</p> <p>Output 2: 11 21 30 1 11 13 14 1 15 7 12 22 7 8 9 10</p>
5*.	<p>Sudoku, originally called Number Place, is a logic-based, combinatorial number placement puzzle. The objective is to fill a 9×9 grid with digits so that each column, each row, and each of the nine 3×3 sub-grids that compose the grid (also called "boxes", "blocks", "regions", or "sub-squares") contains all of the digits from 1 to 9. The puzzle setter provides a partially completed grid, which typically has a unique solution. Completed puzzles are always a type of Latin square with an additional constraint on the contents of individual regions. For example, the same single integer may not appear twice in the same 9×9 playing board row or column or in any of the nine 3×3 sub-regions of the 9×9 playing board. The puzzle was popularized in 1986 by the Japanese puzzle company Nikoli, under the name Sudoku, meaning single number. It became an international hit in 2005.</p> <p>Write a java program to model the Sodoku game. Create a 9 × 9 matrix inside main. Write a function (or functions) to check whether the solution is as per the rule.</p>

5	3		7					
6			1	9	5			
	9	8				6		
8			6				3	
4		8		3			1	
7			2				6	
	6				2	8		
		4	1	9			5	
			8			7	9	

A typical Sudoku puzzle

5	3	4	6	7	8	9	1	2
6	7	2	1	9	5	3	4	8
1	9	8	3	4	2	5	6	7
8	5	9	7	6	1	4	2	3
4	2	6	8	5	3	7	9	1
7	1	3	9	2	4	8	5	6
9	6	1	5	3	7	2	8	4
2	8	7	4	1	9	6	3	5
3	4	5	2	8	6	1	7	9

The same puzzle with solution numbers marked in

*: Optional