

SGIC Java Assignment -1

Sections Covered : [Variables , Conditional Statements , Loops ,Functions , Arrays]

Note : This assignment is structured in the way to test the Logical thinking in programming ,
So we strongly expected to use the fundamental technical aspects of programming
To solve a problem rather than using any frameworks or Libraries.

Please complete this assignment before 18th August 2019 , Sunday.

Q1 . Write a program to swap two integer Variables **with out using the temporary variable**

Q2 . Global variables and Function

You need to write the function to swap variable by using a temporary variable **with in function**, so structure your code to do this task.

Q3 . This question is on reversing Arrays.

You expected to store the characters in a character array , you need to reversely print the contents in the Array.

Q4. Palindrome of a word

a word, phrase, or sequence that reads the same backwards as forwards is known as Palindrome (e.g. : ACCA , POP)

you need to write a logic in order to check the word as palindrome or not.

Q5. Compare two Words

You need to store two words with the same length in two different character Array,
Write a program to compare whether the two words in the array are same or not.

Q6 . Finding the second maximum number in an array

You need to store some numbers in array and expected to find the second maximum number.

Q7. Shifting and Rearranging elements

You have to create an integer array, create a function with two parameters as destination index and pointed index , if the user enters these parameters then the elements in the array should rearrange according to that.

Hint : arr = {9,3,6,1,5,2,2}

Target index : 4th index value 5

Destination index : 1st index value 3

Final out put : {9,5,6,1,3,2,2}

Q8 . list down a unique values and times of occurrence in sorted array

You are expected to store the values like this {1,1,1,1,2,2,3,4,5,5,6,6} , from this you have to list down the unique elements and the number of occurrence of elements.

Note : don't use any java collection frame work

Q9 . list down the unique elements in an array

You are expected to store the values like this {9,2,1,4,5,2,1,9,3,4} in **a random fashion** , from this, you have to list down the unique elements and the number of occurrence of elements.

Q10 . 2d array

Store the values of Name, Contact Number , Address in a 2d string array ,

And print the table as Follows

	Name		Age		Address	

	####		###		#####	
	####		###		#####	
	####		###		#####	

Q11 . Write a console application to print the patterns that specified in console menu

----- MENU -----		
	1 . PRINT SQUARE	
	2 . PRINT RECTANGLE	
	3 . PRINT CROSS (X)	
	4 . PRINT PLUS (+)	
	5 . PRINT DIAMOND	
	6 . To exit application	

Note : The console menu should ask the dimensions parameters related to the shapes