Kalvi education symposium 2025 hackathon java

1) How to reverse a string in java without using reverse?
2) How to check if a string contains only numeric digits?
3) How do you print duplicate elements from an array in java?
4) How to swap two integers without using temp variable?
5) how do you check whether a string is a palindrome in java?
   Note: use for loop and while loop
   Don't use reverse function
6) how do you remove spaces from a string in java?
   Don't use replace function
7) how do you remove leading and trailing spaces from a string in java?
   Don't use trim function
8) how do you find the second largest number in an array in java?
9) how do you get distinct characters and their count in a string in java?
   Sample input and output:
   Enter string: KARURr
   K = 1
   A =1
   R=2
   U=1
   r=1

10)   To check the given number is palindrome or not:
11)   To find the reverse of each word:
   Example:
   String str = "welcome to java class";
   Output: emoclew ot avaj ssalc
12)   To change each word's first letter to upper case:
   Example:
   String str = "welcome to java class";
   Output: welcome to java class
13)   To remove word duplicates from a string

string str = "java sql java python java python";

Output: java sql python

14) To sort the characters in the given string:
Example:
String s = "goodday";
Output: addgooy

15) Insert a string into another string in java
Example:
String text="gowthamannamakkal"
String instext="from"
Int index=10
Output: gowthamanfromnamakkal

16) Triangle program K format.

Example:1

Input : enter no. of rows: 7 (input should be odd number)

Output:

*			*
*		*	
*	*		
*			
*	*		
*		*	
*			*

Example:2

Input : enter no. of rows: 9 (input should be odd number)

Output:

*				*
*			*	
*		*		
*	*			
*				
*	*			
*		*		
*			*	
*				*

==========oops==============

1) Create a Student class with rollNo, sname and mark as attributes. Write a method to calculate the grade based on the marks and display the grade. Create multiple instances of the Student class and print their grades.

Conditions:

Mark>=85   outstanding

Mark>=75   excellent

Mark>=65   good

Mark>=50   fair

Mark<50   reappear

2) Create a Employee class with empno, ename and salary as attributes. Write a method to calculate the bonus based on the salary Create multiple instances of the Employee class and print their bonuses.

Conditions:

Salary >=30000   bonus : 7%

Salary 20000 to 29999   bonus: 4%

Salary below 20000   bonus: 3%

3) Write a program to accept a roolno, student's name and three marks. Calculate the total and average, and display the all students using a class and object.

Conditions:

Display average in descending order

4) Create an Employee class with members empNo, name, department, and salary. Use a one-dimensional array of Employee objects (size N nos) to read the data for n employees. Display the data and determine which employee has the highest salary

5) Write a Java program to create a class called "Movie" with attributes for title, director, actors, and reviews, and methods for adding and retrieving only reviews.

6) Write a java program to create a class called "Enquiry" with attributes for eno,ename,course,address,phoneno and totalfeess. Create multiple instances of the Enquiry class and store in database(msaccess/mysql).