

GENERAL INSTRUCTIONS

1. **VERY IMPORTANT – You are NOT allowed to share the contents of the question paper with others in any form (DOC,PDF, JPG etc). You are also NOT allowed to share your answers (Java code) with anyone else except MVI Technologies. As soon as you have completed the test, you need to delete the question paper physically from your system and maintain STRICT CONFIDENTIALITY. If we come to know that you have shared your questions/answers with others, it will lead to your INSTANT DISQUALIFICATION**
2. It is compulsory to answer all the questions.
3. Only NOTEPAD can be used to write the code. IDE's such as Eclipse are not allowed.
4. You are NOT allowed to compile and execute the code.
5. As soon as you have finished answering all the questions, you need to email the source code (with .java extension) in separate files as attachment. For example, if there are 4 questions, there will be 4 files with .JAVA extension
6. For file related questions, you need to create sample TXT file/s. These TXT file/s also need to be emailed along with the JAVA files.
7. All the Java and txt files should be compressed and sent in a single file named <Your_Name>.zip. For e.g., if your name is Arun Kumar, the file name will be "Arun_Kumar.zip"
8. While taking the written test, **it is MANDATORY to turn on the video camera and share your screen throughout the entire duration of the test**
9. Indulging in malpractices such as referring to Google or taking any other form of assistance will lead to immediate disqualification.
10. You are NOT allowed to refer to the Java online API documentation (Java libraries) during the test
11. It is allowed to use classes provided by the Java library such as String, Scanner, List, Map etc. However, for certain questions, restrictions will be imposed on the usage of some library classes.
12. All inputs (for arrays, other objects etc) need to be taken from the keyboard by using the Scanner class. You are NOT allowed to initialize values by hard coding values.
13. For your solutions, GUI (Graphical User Interface) is NOT required. Instead, you can use the Scanner class to accept input and then use System.out.println() to display output on the screen
14. You need to send the JAVA files (and TXT files if required) within 5 minutes of the completion of the test. Else your code will not be considered.

1. Write a java program to check if a String Array contains duplicate words or not and how many occurrences?

Example:

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{"one", "two", "three", "one", "four", "three", "one"}
```

Output -

Duplicates are

one - 3 times

three - 2 times

Note: Accept the words from the user using Scanner, do not hard code.

2. Write a java program to do the following

- a) Manually Create a TXT file called "Items.txt" which contains the details of the items in a store

For example, each line in the file is of the format Item no., Item name. Create 7 lines of data.

Example I001,Smartphone

I002,Television

- b) Read all the data from the file and load into one suitable data structure in java. Use the correct data structure which can enable fast retrieval
Write a method that will take the reg no as input and prints the corresponding item name

3. Write a java program to accept a sentence from the user (through Scanner) and reverse the order of the words in the sentence. Don't reverse the characters within a word

Example: "one two three" after reversing will be "three two one"

4. Create a Set<Integer>. Use an appropriate Set implementation which will automatically sort the elements that are added to the Set. Write code to demonstrate that the entered elements are sorted. For this question, no need to use Scanner, you can directly add elements to the set