## Phase - 4



## **Array Programs**

- 1. A Train going to Busan have 2 containers which contains Zombies. Container A has 6 zombies, and Container B has 4 zombies. Passengers have to reach in engine container by passing through them. Help them by transferring zombies from both that containers to a new Container C. Build a C++ program for it.
- 2. Hitler ordered a 10 soldiers pared to align in a row. He wants to know that which soldier have the highest killing score. Help him by design a C++ Program.
- 3. Design a C++ system which automatically identifies if a given word contains any letter or symbol between both SHIFT keys from our regular PC Keyboard.
- 4. Ronak gives an examination in which he gains internal viva marks in all subjects like this: 23, 19, 22, 28 & 23 (all marks are out of 30). And gains final written examination marks like this: 65, 58, 49, 52 & 64 (all marks are out of 70). Evaluate final total examination marks by adding both exam marks and reveal marks out of 100 in each subject by using C++. Also, final total average value for that.
- 5. Devansh gives a list of random numbers to his colleague Rohan to distinguish all odd and even numbers, and store them in different lists. Help Rohan by building such a solution with help of C++.

## Phase - 4



## **Array Programs**

- 6. A Teacher gives a list to students in which a list contains many years in numeric format i.e 1994, 1947, 2002, 1996, etc. All students supposed to find all duplicate years which occurs more than once and store them into another list. Design such type of system with help of C++.
- 7. A Frontman can randomly assign two 3x3 matrices to all participants in Squid Games. All participants have to add that matrices and store final answer as a separate matrix to win this type of round in the game. Build a C++ system to help them all.
- 8. Design a system in C++ which automatically transpose any given Matrix of RxC dimension. Where R is number of Rows and C is number of Columns. Help three musketeers for passing an interview round by solving this last question.
- 9. Columbian army arranged all 9 forbidden refugees in a 3x3 matrix formation. An army cadets have to find that which one of the refugees stats the highest weight and which one weighs the lowest weight. Help army cadets by preparing C++ solution for their undercover mission.
- 10. Help Martin to solve a special kind of puzzle by designing a C++ system. Total 25 random numbers arranged in a form of Square Matrix. To solve that puzzle, he has to find addition of all diagonally aligned numbers on puzzle cardboard.

# Phase - 4



## **Array Programs**

- 11. A one-sided open Tennis ball jar has capacity of storing total 5 different balls. Each ball has unique number attached as a label itself. Arrange all that balls in a jar in such a way that their order is stats as a reverse by referring attached numbers as a label. Create a C++ system for doing such type of task.
- 12. A College wants to celebrate all degree holder students to throwing their hats in a predefined way: First all 25 students have to arranged in a Square Matrix. First, an upper half of triangle matrix will throwing hats and then a lower half of triangle matrix will. Help them to achieve this unique idea by using C++.
- 13. A Math teacher wants to teach how to perform a dot product of two matrices. Design a better approach in C++ to help this math teacher.