# **Assignments**

| 1. Write a program to find smallest of three numbers using ternary operator |
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| *Code of the program & screenshot of the output.* |
| 1. Write a program to find the frequency of each element in the array |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to find Second Largest Number in an Array |
| *Code of the program & screenshot of the output.* |
| 1. Program to Remove Duplicate Element in an array |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to find all subsets of a string. |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to find maximum and minimum occurring character in a string |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to print the prime numbers upto a limit. |
| *Code of the program & screenshot of the output.* |
| 1. Create a program to check whether the given number is an Armstrong Number |
| *Code of the program & screenshot of the output.* |
| 1. Create the functionality of ATM    1. To withdraw the money, we simply get the withdrawal amount from the user and remove that amount from the total balance and print the successful message.    2. To deposit the money, we simply get the deposit amount from the user, add it to the total balance and print the successful message.    3. To check balance, we simply print the total balance of the user.    4. Exit |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to Find Square Root of a Number |
| *Code of the program & screenshot of the output.* |
| 1. Write a program with different functions for the following operations in array    1. Find Smallest element    2. Find Largest element    3. Sum of all elements    4. Number of elements |
| *Code of the program & screenshot of the output.* |
| 1. Write a program to check weather the sum of digits and product of digits of a number is same |
| *Code of the program & screenshot of the output.* |
| 13. Write a program that consists a class named ‘student’, it should have following characteristics   * 1. Name   2. School (same for all students - thus create as static)   3. Grade   4. Mark   5. A function to check if student is passed or not   The program should ask for   * 1. Add student   2. Search student - it should show details including pass status   3. Display all students   4. Exit |
| *Code of the program & screenshot of the output.* |
| 14. Create the following patterns: |
| *Code of the program & screenshot of the output.* |
| 15. Create the following patterns: |
| *Code of the program & screenshot of the output.* |
| 16. Given a string, S of size N, and a number of rows R, the task is to print the given string in a vertical zigzag fashion with respect to the given number of rows as shown in the examples.   * 1. Input: S=“123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz”, R = 9   Output:   * 1. Input: S = “AttentionReaders!Don’tStopLearning!HappyLearning!”, R = 12   Output: |
| *Code of the program & screenshot of the output.* |
| *17. Write a program to delete all the multiples of 5 in an array. Print the array elements in the following pattern.*  \_ \_ X X X X  \_ X X X X  X  \_ \_ X X X  \_ X X X  X  X  \_ \_ X X  \_ X X  X  X  X  \_ \_ X  \_ X  X  X  X  X |
| *18.* Write a C program to draw the following pattern  X  \_ X X  X  X  \_ \_ X X X X  X  X  X  \_ \_ \_ X X X X X X X X |
| *19.* Merge two arrays & remove duplicate elements from the array. Print the array elements in the following pattern.  *\* \* \**  *\**  *\**  *\**  *\* \* \* \* \* \**  *\**  *\**  *\**  *\**  *\**  *\**  *\* \* \* \* \* \* \* \* \** |
| *20.* Given a string. Find the length of the string. If the string length is odd print the following pattern  X X  X X  X  X X  X X  If the string length is even, print the following pattern  X X  X X  X X  X X  X X  X X |
| *21. Write a C program to find the second largest element of an array(Let it be ‘n’) and print ‘n’ number of \* in the following pattern.*    *\* \* \* \* \* \* \* \* \* \**  *\**  *\* \* \* \* \* \* \* \**  *\**  *\**  *\* \* \* \* \* \**  *\**  *\**  *\**  *\* \* \* \**  *\**  *\**  *\**  *\**  *\* \**  *\**  *\**  *\**  *\**  *\** |
| *22. Write a program in C to find even numbers in an array. Print the even integers in following pattern*  X  X X  \_ X  X X X X  \_ \_ X  X X X X X X  \_ \_ \_ X  X X X X X X X X  \_ \_ \_ \_ X |