# **CS1100 Practice Questions**

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#### Amateur

- 1. Write a program to get two numbers as input and output their
  - Sum
  - Difference
  - Product
  - Quotient( If cannot do, then should print Divide by Zero error)
- 2. Write a Program to get three numbers as input and output their Maximum and Minimum among them.
- 3. Write a Program to get four numbers as input and output the numbers which are neither maximum nor minimum among them.
- 4. Write a Program to get a name as input and print the name as a whole (not using loops).
- 5. Write a program to get 1st 100 numbers as input and print all of them in ascending order.
- 6. Write a program to get 1<sup>st</sup> 50 numbers as input using
  - While
  - Do While
  - For
- 7. Write a Program to get first 10 numbers as input and print their names in English (Ex: 1-One, 2-Two...) using 'Case' statements and should print error if not in 1<sup>st</sup> 10 (Hint: Use default).
- 8. Write a Program to do addition of two numbers using functions.
- 9. Write a Program to search for a number in array using Linear search.

### Semi Professional

- 1. Write a Program to convert a number from Binary to Decimal.
- 2. Write a Program to convert a number from Decimal to Binary.
- 3. Write a Program to convert a number From Ternary (Base 3) to Decimal.
- 4. Write a Program to convert a number from Decimal to Ternary using arrays and recursion separately.
- 5. Write a Program to Get first 100 numbers as input and print them in reverse order.
- 6. Write a Program to search for a number in array using Binary search.
- 7. Write a Program to find the maximum and minimum of an array using pointers and not using pointers.
- 8. Write a program to swap two numbers using Call by reference and return the result.
- 9. Write a Program to find the factorial of a number using functions by

- Iteration
- Recursion
- 10. Write a Program to find maximum and minimum of an array using the sorting.
- 11. Write a Program to find second maximum and third minimum of an array using sorting.
- 12. Write a Program to take a file as input and output its Contents.
- 13. Write a Program to take 10 students' details (Roll number, name, marks of 5 subjects) and then print the details of all students. (Use 'struct')

#### Veteran

- 1. Write a Program to find second maximum and third minimum of an array using Partitions.
- 2. Write a Program to take any 100 numbers as input and print every 3<sup>rd</sup> number in the array.
- 3. Write a Program to take any 100 numbers as input and print the sum of last 25 numbers.
- 4. Write a Program to take any 100 numbers as input and print the sum of even indexed numbers.
- 5. Write a Program to take 10 students' details (Roll number, name, marks of 5 subjects) and then print the details of students who got the maximum average of marks and minimum average of marks. (Use 'struct')
- 6. Write a Program to take a file as input and output the contents of the file from 5<sup>th</sup> line to 10<sup>th</sup> line. (Hint use count of '\n' to count the number of new lines)
- 7. Write a Program to take a file as input and output the contents of the file every second line i.e print alternative lines in the file.