

Day 1 DSA With C++

Problem 1:

- Concepts : Loop, Condition, Builtin Module
- Requirements :
 - Given a number find out if that number is prime or not.
 - the input may range from 2^{60} to -2^{59}
 - Optimize the code.

Problem 2:

- Concepts: loop, Condition
- Requirements:
 - Given a number find out the Fibonacci Sequence till that number.

Problem 3:

- Concepts: Datatype, Loop, Condition
- Requirements:
 - Given a String reverse in input return the reversed string.
 - Given a Number reverse the number, the range of number will be from 2^{100} to -2^{99}

Problem 4:

- Concepts : Functions
- Requirements :
 - Define four function as follows addition, subtraction, multiplication, divide and print_result
 - For all the function there will be no return statement.

- Apart from using print statement to log the output to the console the print_result function will be called.

Problem 5:

- Concepts : loop, conditions, Function
- Requirements :
 - Define function that will take a number and print a square with three conditions :
 - Hollow Square
 - Filled Square
 - inner square
 - for example if input is 5 then the square will look like this
 - Hollow

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

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- filled

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

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* inner

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