

Assignment 9

Submission Instruction:

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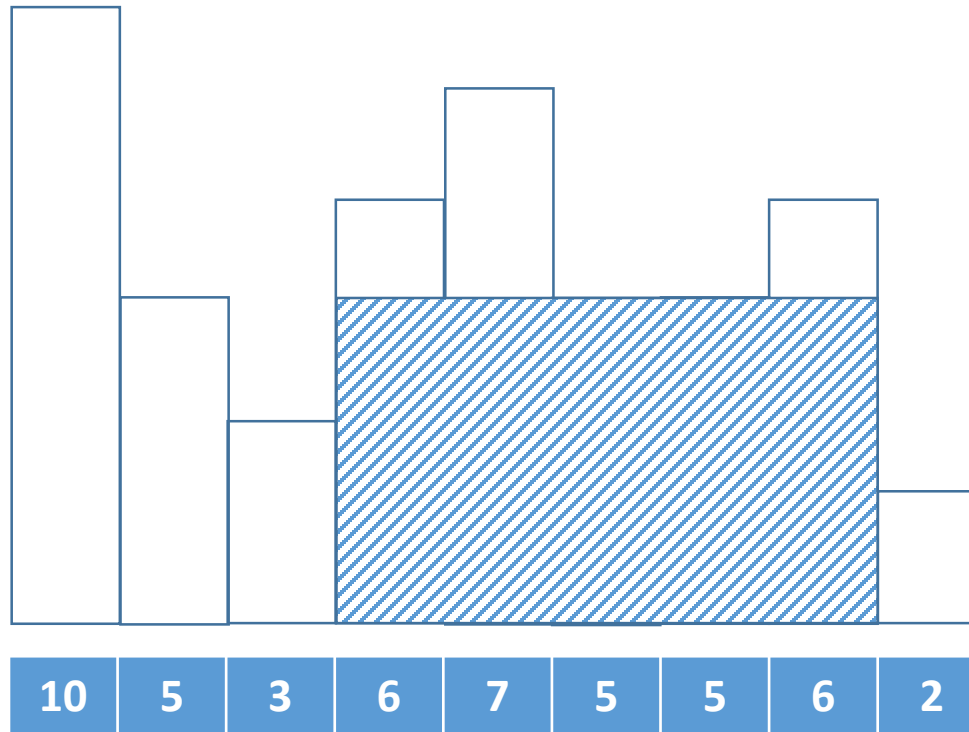
Subject Line: A9_ROLLNO

Attachments: A9_ROLLNO_P1.c/.cpp
A9_ROLLNO_P2.c/.cpp

Deadline: 10-Nov-2024 11:59 P.M.

Problem 1: Largest area rectangle in a Histogram

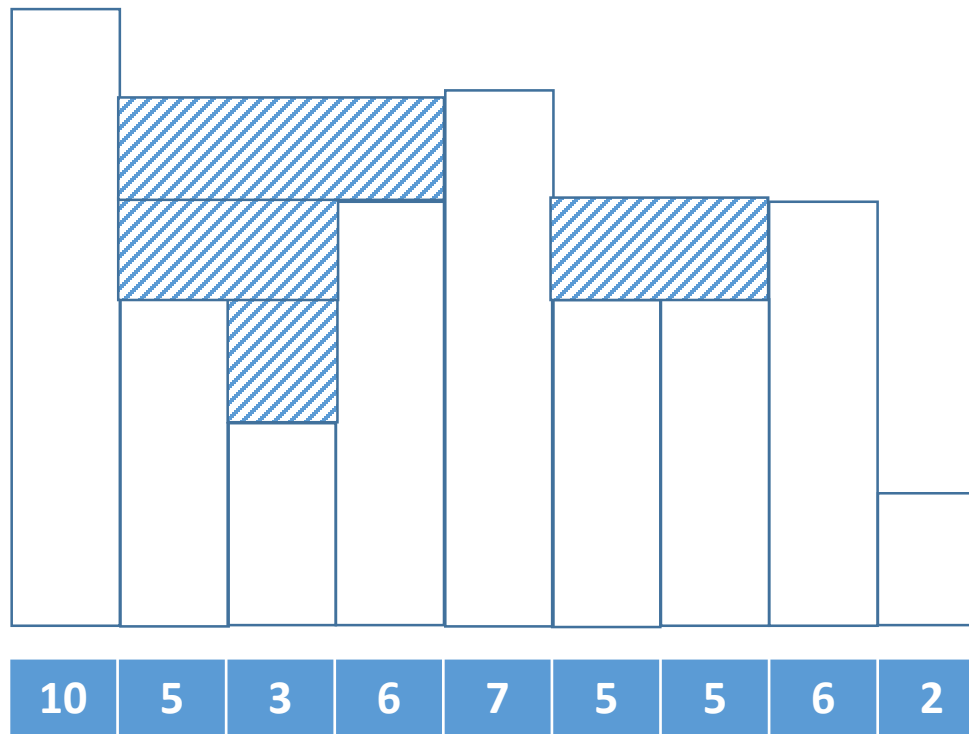
Given a histogram with n bars having height h_1, h_2, \dots, h_n , write a C program that finds the area of the largest rectangle inscribed in the histogram. The width of each bar is one.



Output: 25

Problem 2: Trapping rain water in a Histogram

Given a histogram with n bars having height h_1, h_2, \dots, h_n , write a C program that finds the amount of rain water that can be contained in the histogram. The width of each bar is one.



Output: 9