

QUESTION FOR WEEK-1

During the day, a supermarket will receive calls from customers who want to place orders. The supermarket manager knows in advance the number of calls that will be attempted, the start time, duration and the order volume for each call. Only one call can be in progress at any one time, and if the call is not answered, the caller will not call back. The manager must choose which calls to service in order to maximize the order volume. Determine the maximum order volume for a given day.

Example-1

Input: startTime = [1,5,15,18,30],
 endTime = [30,12,20,35,35],
 volume = [50,51,20,25,10]

Output: 81

Explanation: The calls chosen in this case are from the second, third and fifth customers.

Time range for second customer is from 5 to 12 with volume 51.

Time range for third customer is from 15 to 20 with volume 20.

Time range for fifth customer is from 30 to 35 with volume 10.

Maximum volume = $51 + 20 + 10 = 81$

Example-2

Input: startTime = [1,1,1],
 endTime = [2,3,4],
 volume = [5,6,4]

Output: 6

Explanation: The calls chosen in this case is from the second customer only.

Time range for second customer is from 1 to 3 with volume 6.

Maximum profit = 6

