

Task-1(a) Take a input file, read the first line and separate the size and a target by unpacking. We can use outer loop to fix pointer and that pointed value is add with every consecutive value in the outer loop to check wheather it matches the target if match the position of the each of the value is noted and one is added with each position value.

The impossible is write on the output file.

b) Input: file taken, size and target  
Separated, two pointer set, one is  
at the initial position and other  
at the final if matches position  
of the pair of values noted  
and added to the list. if the  
total is less than the target  
then pointer at the initial position  
shifted to the right and then  
the current final position and initial  
position added, which is compared.  
the process repeat again.



## Task 2 a

It is arranged in an ascending order using a merge sort algorithm. The array is divided into two parts until we get an array with a single element. Single element is returned where it was called from and the sub array is compared which is then sorted until it is returned to where it was called from. In this way every divided sub array is gets merged together.

2-(b)

Two Separated array: Consider  
a pointer set to each of its  
initial position and their values  
compared. if the smaller value  
is detected it is then  
added to another array. The  
pointer is shifted from the array  
from where we got smaller  
value. This process repeats until  
the element is sorted.



3

Int<sup>3</sup> Input file taken, Sort according  
to end time. First interval of the  
time added to the list, then  
Second interval times, Start time is  
compared with the already interval  
ends time. If the start time is  
equal or greater only then the  
individual time is added. The Count  
is wrote on the output file.



4

Input file taken and a loop is run through it. Start and end time separated which is then added to the list as a tuple of end and start time. Sort the list of Task.

according to end time. A Counter taken to count the number of task and another list with a size of the number of people considered. Iterating and running the inner loop Count value is increased.