

Task-1(a)

At first, I read the ~~the~~ input file. Then, write a for loop and convert every element in integers. Then, I write a code to append in the output file. Then, just check condition if it is an even or odd and write it into the output file.

Task-1(b)

At first, ~~re~~ I write ~~a~~ a code to read the input file. Then, write a for loop and split every line to determine numbers and sign and then just calculate it and write in the output function.

Task-2

At first, I write a code to read the input file.

Then, split the second line. Then, ~~the~~ first for

loop and a check variable. ~~so~~ then the nested

for loop which will continue until length of that ~~array~~

array - ~~the index~~ i (first for loop's variable) - 1. Then we have to

check if that value is greater than the next value.

Then we swap it, else we break it if ~~At first~~ we

don't have to swap. As a best case scenario, the

check variable is always false. So, no need to go to

the nested loop. As a result, $\Theta(n)$.

Task-3

At first, read the input file. Then just split the 2nd and 3rd line. Then we used a for loop and range is $\text{len} - 1$ of that array and a max_index variable. Then wrote a nested loop, range from $i+1$ to len of that array, as it is excluded, so basically it will run until $\text{len} - 1$. Then just check if ^{nested for loop's} marks is ~~to~~ greater than the max_index's marks, ~~the~~ or if both are equal then have to check if it is ~~greater~~ less than that index then just update max_index value. After the nested loop we have to swap and that's how we can find our desired output.

Task 4

At first, we have read the input file. Write 3 list. Then write a for loop and append in those lists. Then Another for loop, in ~~the~~ ~~for~~ train name for ascending orders, if they are equal then we ~~have~~ arrange them according to their time in descending orders. Then just swap them if needed.