Task 1 A

1. Open the input file
2. Use readlines function to access as list.
3. To remove the '\n' ~~we are using~~ I am using .strip() and keeping the new strings at numbers empty list.
4. From the list number, I am checking if the number are odd or even by calculating the mod. Then I am storing them in a new output file.

TASK 1B

1. Open the file
2. Using readlines make a list
3. Replace the word "calculate" and stripped all the strings.
4. From the element of list of modified strings we are splitting every elements based on space. So, we are now getting a lists that will contain three elements, number and operator.

5. Then we use membership operator to find if "+", "-", "*" or "/" is in the list or not. Based on the operators found, we do an operations

6. We then save ~~and int~~ out outputs in a new text file.

Task 2

1. Using ~~the~~ traditional ~~bubble~~ sort algori we tried to obtain O(n) for the best cases.

2. To achieve that I have taken a boolean variable "sort" and & set it to "True".

3. Then if the array is not already sorted it will enter the first if condition and it'll set sort to False resulting the loop to continue.

4. But if the array is not already sorted then it'll not enter the if condition and the loop will break.

Task 3

1. I have used the sort algorithm from task 2. But I have implemented one for ascending sort and another for descending sort.
2. Took a dictionary.
3. made the marks key and the ids one value as in a dictionary.
   eg. {mark: [id, id, id]}.
4. Then sorted the marks on keys ~~as~~ in descending order and then I sorted the ids in ascending order and added them in my output text file.