Efficiency of algorithm

increment\_wait\_time(): The big(O) of this function is O(1) because it will always execute in the same time regardless of the size of the input data. And there are no loops nor comparisons involved in this function.

Rider():this is the constructor of the Rider class, The big(O) of this function is O(1) because it will always execute in the same time regardless of the size of the input data. And there are no loops nor comparisons involved in this function.

Elevator (): This is the constructor of the Elevator class, the big(O) of this function is O (1) because it will always execute in the same time regardless of the size of the input data. And there are no loops nor comparisons involved in this function.

Incerement\_list\_wait\_time(): The big(O) of this function is O(N), this function is just iterating through the Rider list and getting the wait time for each rider so the big(O) will be O(N), it will be the size of the list.

Go\_up():this function does not return anything and it is only incrementing the location to move the location of the elevator up. So, the big(O) is O (1) because it will always execute in the same time regardless of the size of the input data.

Go\_down():this function does not return anything and it is only decrementing the location to move the location of the elevator down. So, the big(O) is O (1) because it will always execute in the same time regardless of the size of the input data.