

(1)

First of all, it calls `r_inp` to read input rules and construct the list of intervals for each test case. It initializes an empty list `list1` to store the selected intervals for each case. It appends the first interval from the list of intervals to `list1`. It sorts the intervals based on their end times using a lambda function. It iterates through the sorted intervals and appends those with non-overlapping start times to `list1`. Then it calls `w_out` to print.

(2)

It calls `n_inp` to read the list of tasks and the number of available people from `input2.txt`. It calls the `maxt` function with the list of tasks and the number of available people. It prints the result ~~which~~ means the count of task assigned.

to the console. Then it calls w-out to write the result in output2.txt file.

(3)

First of all, it calls n-inp to read the sizes of unions resulting from the union operations from input3.txt. It creates a disjoint class and in the class find method performs the find operation and union method performs the union operation, merging two disjoint sets. Then it calls w-out function to print output.