task:1

This is a greedy approach to find the maximum number of task without overlap, by their start and finish time. The function maximum_number_of_task() Sort the list based on their finish time. task_completed variable gives us the total number of task without overlap. and also maximum task.

task:2

This is similar to task 1. but this time we need to find maximum number of task by the given people. max_activites' to keep track maximum number of task that can be completed and 'time' to keep track on current time. In the loop, it checcn the start time and if the current task is greater than the current time, it means the task can be completed without overlap.

Task 3 : friend_circle()

'parent' is initialized so that each person is a parent of themselves. This function have two nested function

Union() is used for union operation on two friend circles represented by 'x' and 'y'.

find() is to identify the parent of each person and update the 'parent' array from the union. it is a recursive function.