2023205195

Psuedo code for the method for finding the maximum bandwidth demand and the correspoding time.

```
function find_max_bandwidth_time_demand(intervals):
        // intervals = [starting time, ending time, bandwidth]
        events <-- empty list
        for each interval:
                I, r, b <-- start, end, bandwidth
                events <-- add (I, b)
                events <-- add (r, -b)
        sort events starting time by default
        current_bandwidth, max_bandwidth, max_time <-- 0
        for each index of the length of the events mibus 1:
                time, change <-- events[index]
                next_time <-- events[index + 1]</pre>
                current_bandwidth <-- add change</pre>
        if current_bandwidth >= max_bandwidth:
                max_bandwidth <-- current_bandwidth
                max_time <-- (time + next_time) / 2
                if index is out of range:
                        next_time <-- events[i + 1][0]
                        if time < next time:
                                max_time <-- (time + next_time) / 2
                        else:
                                max_time <-- time
                else:
                        max_time <-- time
return max_time, max_bandwidth
```