Assignment_1
Maximal_Point
Report

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Video_Explanation
My_code

      I am submitting the report for the observation which I observed from my code. Consider the attached tables for observations. I tested both the algorithms on the various datasets (as mentioned two of them) and found the following result.

```
data1 = [
    (5, 12),(9, 20),(3, 8),
    (17, 6),(11, 14),(1, 16),
    (7, 18),(13, 10),(19, 4),
    (15, 2),(8,19), (90, 1)]
```

```
data2 = [
    (1, 3), (2, 2), (3, 1), (3, 4), (4, 3),
    (2, 5), (5, 2), (6, 4), (7, 1), (7, 3),
    (8, 6), (9, 2), (10, 4), (11, 3), (12, 5),
    (13, 4), (14, 1), (15, 6), (16, 3), (17, 5)
]
```

Parameters_To_determine	Data1		Data2	
Test cases –>	Sweeping left to right	Sweeping right to left	Sweeping left to right	Sweeping right to left
No. of iterations including all the loops.	44	21	27	17
Extra space required (Candidate List)	Yes	Yes	No	No

As we can see in L to R there are more iterations than the R to L algorithm. Also in the L to R approach there is an extra list required for storing the candidates and we have to process the whole candidate list in each iteration. So the R to L sweeping algorithm is more effective for such problems.