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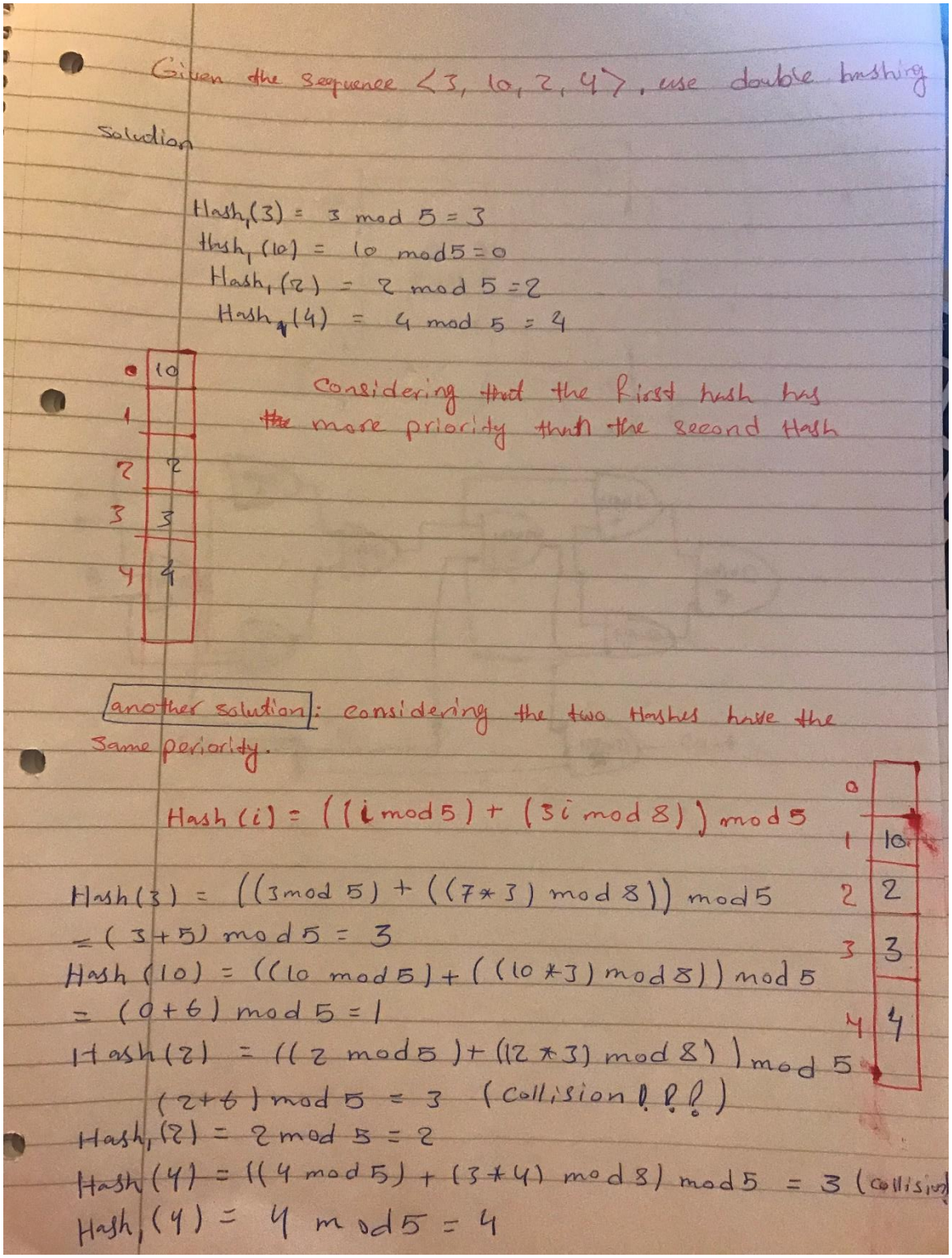
Question 9.1.1:



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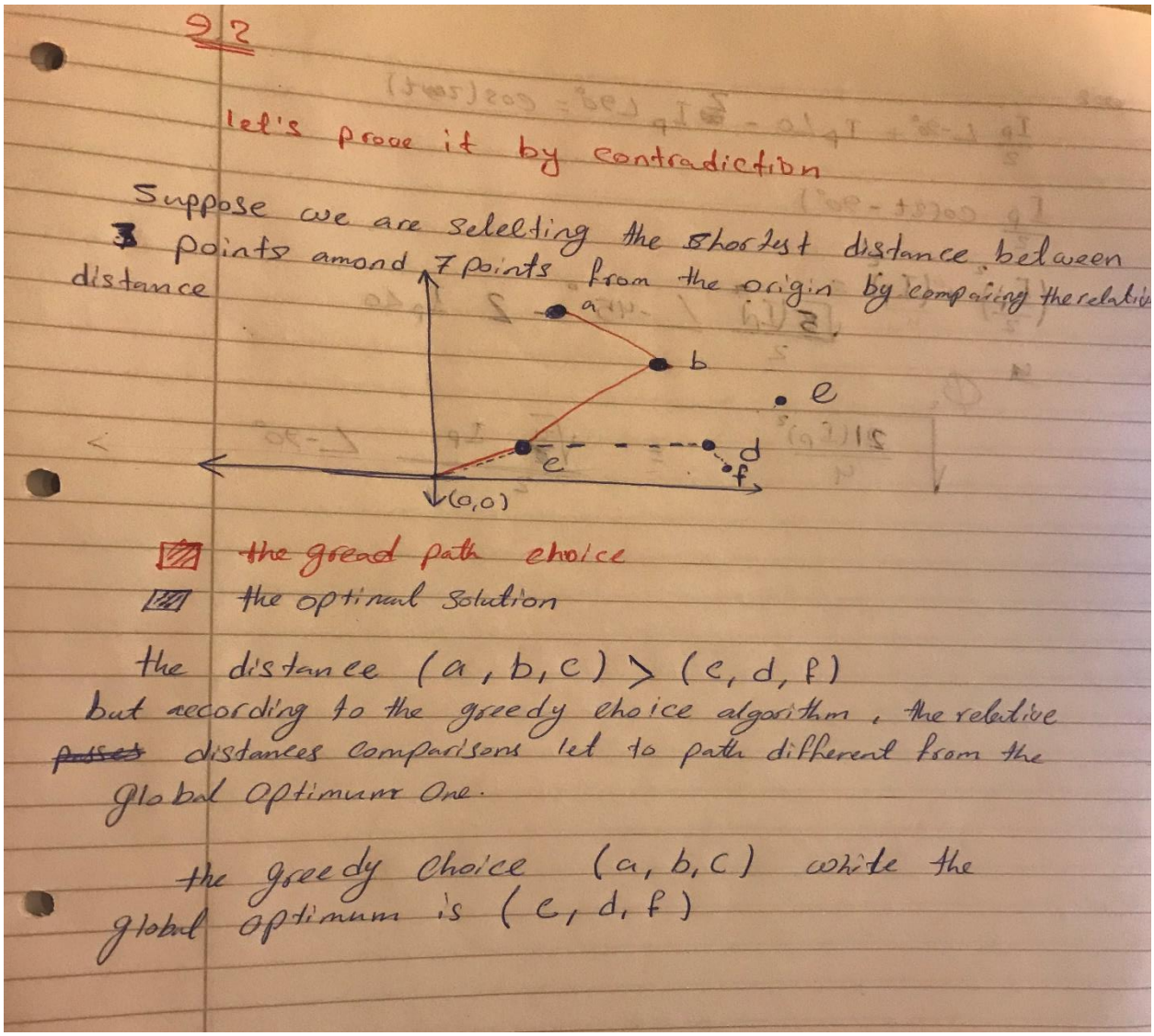
Question 9.1.2: reference : the slides

The reason why I chose my hash function to be (hash = key mod maxSize )is that

For each key, there will always exist a unique index less than the maximum size of the array indicating the index of the inserted value.

Question 9.2.1



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Question 9.2 .2

```
Greedy-select ( set A)
 set B = set A
  While A != NULL
// searching for the latest start time event;
     Do:
        if (x2.strating_time > x1.strating_time)
// x1 and x2 are elements representing activities
                                The_latest_start = x2;
                                B.Remove(x1)
     While (there is more than one event in B )

Remove x2 and all overlapping elements from A
  End while
Return B
```

For the entered unsorted set, the algorithm will copy the elements to another set first; and after that, the algorithm will remove the elements with the earlier time one by one till the set B has only one element. And the