**Problem Statement:** Find the largest alphabetical sequence in given string

In this problem we will find the largest alphabetical sequence means increasing order of sequential alphabets.

**Example:** If we take fredvghklmn then the largest alphabetical sequence will be ghklmn as these are in increasing order and sequential order.

|  |  |
| --- | --- |
| Expected Input | Expected Output |
| abcdab  rstuabc  abc123ab  abcdpruab  pqrsabyz | abcd  rstu  abc  abcdpru  pqrs |

**Pseudo Code**

1. Enter a string
2. Convert string into characters into ls
3. Calculate length of ls in len
4. Declare a as an empty
5. Declare b as an empty
6. Set i=1
7. If i<=len
   1. If a=’’ then a=a+ls[i] else
   2. If ls[i-1]<ls[i] then a=a+ls[i] else
   3. If length(b)<=length(a) then b=a else a=ls[i]
   4. Increment i and goto 7
8. If length(a)>=length(b) then print b else print a

**Trace Table**

|  |  |  |  |
| --- | --- | --- | --- |
| Expected Input | Expected Output | Actual Output | Test Result |
| abcdab  rstuabc  abc123ab  abcdpruab  pqrsabyz | abcd  rstu  abc  abcdpru  pqrs | abcd  rstu  abc  abcdpru  pqrs |  |

**Final Result**

**Expected Inputs and Outputs**

