[input data given by a teacher]

<testdata1> with STsize=1000

```
Index in ST
                         identifier
    0
                                           (entered)
    2
                         Hear the
                                            entered)
   11
                         Rhythm0f
                                            entered)
   20
                         waves
                                            entered)
   26
35
                         h1tt1n0n
                                            entered)
                         the
                                            entered)
   39
                         shore
                                           (entered)
   45
                         theyare
                                                     (entered)
   56
                         Speakin
                                           (entered)
   56
                         sPeakin
                                           (already existed)
   56
                         speakin
                                           (already existed)
   64
                            theyare
                                                    (entered)
   75
                         tell1n_me
                                                     entered)
   85
                         to
                                            (entered)
   88
                         relax
                                           (entered)
   94
                                           (entered)
                         Imnot
  100
                         goodAt_that
                                                     (entered)
  112
                         butnowiknowl
                                                     (entered)
  125
                         needIt
                                           (entered)
  125
                         neeDiT
                                           (already existed)
  125
                         needit
                                           (already existed)
[[ HASH TABLE ]]
             3 : h1tt1n0n
Hash Code
             6 : i
Hash Code
            19
Hash Code
                 Rhythm0f
Hash Code
            22
                 the
            28
Hash Code
               : to
Hash Code
            29
                 butnowiknowl
Hash Code
            33
                 Hear_the
            34
Hash Code
                 needlt
Hash Code
            40
                    theyare
                               theyare___
Hash Code
            41
                 relax
Hash Code
            46
                 shore
Hash Code
            48
                 Speakin
Hash Code
            51
                 waves
            52
Hash Code
                 Imnot
            67
Hash Code
                 goodAt_that
            98 : tell1n_me
Hash Code
<132 characters are used in the string table>
```

<testdata1> with STsize=30



<testdata2>

```
identifier
Index in ST
                                                    (entered)
    0
                         thisTESTDATA
                                                    too long identifier
..Error...
                         issssssssss
                         fOrChecking
   13
25
25
32
                                                    (entered)
                         StRing
                                           (entered)
                                           (already existed)
                         sTring
                         lengthLength
                                                    (entered)
                         CAUTION
                                           (entered)
   53
                         eachw0rds
                                                    (entered)
                                                    too long identifier
..Error...
                         mustNOTexceed12
                         character2
                                                    (entered)
   64
[[ HASH TABLE ]]
Hash Code
           56 : CAUTION
           64 : StRing
Hash Code
           85 : lengthLength
Hash Code
           92
               : character2
Hash Code
           93 : eachwOrds_ fOrChecking
99 : thisTESTDATA
Hash Code
Hash Code
<75 characters are used in the string table>
```

<testdata3>

```
Index in ST
                         identifier
    0
                         CAUTION
                                           (entered)
    8
                         COPY
                                           entered)
                         RIGHT
   14
                                           (entered)
                         2021
                                 start with digit
 .Error...
                         BY
   20
                                           (entered)
                         2WHA
 .Error...
                                 start with digit
   23
                         WOMANS
                                           (entered)
   30
                         UNVERS
                                           entered)
   37
                         TY
                                           entered)
                         SE LAB
   40
                                           entered)
   47
                         ALL:
                                           (entered)
   51
                         rights
                                           (entered)
   58
                         _RÉsERved
                                                   (entered)
[[ HASH TABLE ]]
Hash Code
            14 : ALL
            15:
                 SE LAB
Hash Code
           20
Hash Code
                 BY
            38
Hash Code
                 TY
            43
                 RIGHT
Hash Code
            56
Hash Code
                CAUTION
            58
Hash Code
                 rights
                 RÉsERved
Hash Code
            60
Hash Code
            62
                 WOMANS
                 UNVERS
                          COPY
Hash Code
            76
<68 characters are used in the string table>
```

<testdata4>

```
Index in ST
                         identifier
    038
                                            (entered)
                         JUST
                                            entered)
                         called
                                            entered)
   15
                                            (entered)
                         @say
. .Error . . .
                                           @ is not allowed
   17
                                           (entered)
 Error...
                         L%ve
                                           % is not allowed
                         YOU
   19
                                            (entered)
   17
                                            (already existed)
   3 8
                                            (already existed)
                         iust
                                            (already existed)
                         called
   23̈
                                            entered)
                         to
   26
                         say
                                            (entered)
                                           (entered)
   30
                         HOw
..Error...
                         much~
                                           ~ is not allowed
   35
                                           (entered)
   38
                         CĀRE
                                            (entered)
                         THANK
   43
                                           (entered)
..Error...
                         #u
                                           # is not allowed
   49
                                           (entered)
[[ HASH TABLE ]]
Hash Code
Hash Code
             6
            12
                 CARE
Hash Code
               : called
Hash Code
            14
Hash Code
                 U
Hash Code
            18
            28
Hash Code
                 to
Hash Code
            34
                 say
            35
                 THANK
Hash Code
            55
                 JUST
Hash Code
                 HOw
Hash Code
            67
            87
Hash Code
                  YOU
<51 characters are used in the string table>
```

[No error in the input data file]

<input_1>

```
Index in ST
                        identifier
    0
                        С
                                        (entered)
    2
                        This
                                         (entered)
    7
                        is
                                         (entered)
   10
                        а
                                        (entered)
   12
                        test
                                        (entered)
   17
                        data
                                        (entered)
   22
                        text
                                        (entered)
   27
                        file
                                        (entered)
   32
                       with
                                        (entered)
   37
                                        (entered)
                        no
   40
                        error
                                        (entered)
    2
                        this
                                        (already existed)
    7
                        Is
                                        (already existed)
   46
                        our
                                        (entered)
   50
                        first
                                         (entered)
   56
                        assignment
                                                 (entered)
   67
                                         (entered)
   70
                        the
                                        (entered)
                        Complier
   74
                                        (entered)
   83
                        class
                                        (entered)
                        Today
   89
                                        (entered)
                                        (already existed)
    7
                        is
   95
                        Thursday
                                        (entered)
  104
                        Have
                                        (entered)
   10
                        Α
                                        (already existed)
  109
                        nice
                                        (entered)
  114
                                        (entered)
                        day
[[ HASH TABLE ]]
Hash Code
            0 : c
Hash Code
           11 : data
Hash Code
           16 : nice
Hash Code
           17 : file
          19 : day
Hash Code
          21 : Have is
Hash Code
Hash Code 22: the on no
Hash Code 35 : class
Hash Code 41 : This
Hash Code 43 : our
Hash Code 45: with
Hash Code 46: Today
Hash Code 49: test
Hash Code 53 : first
Hash Code 54 : text
Hash Code 55 : error
Hash Code 60 : Complier
Hash Code 82: assignment
Hash Code 85: Thursday
Hash Code 98: a
<118 characters are used in the string table>
```

<input_2>



<input_3>



<input_4>

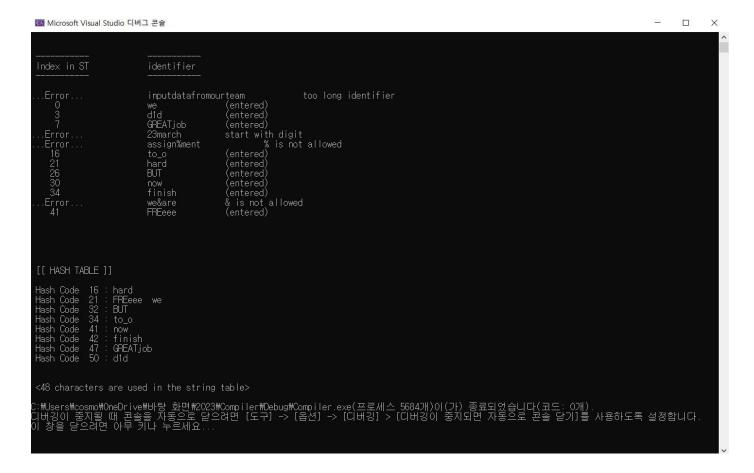
```
identifier
Index in ST
                          abc
                                            (entered)
    4
                         a12
                                             entered)
   8
14
                          input
                                             entered)
                          input1
                                             entered)
   21
                         data
                                             entered)
   26
34
                         data0ne
                                             entered)
                          ×1
X12
                                             entered)
   š7
                                             entered)
   41
                         team13
                                             entered)
   48
                         compiler
                                            (entered)
   57
                          indentifier
                                                      entered)
   69
79
82
                         hashtable
                                                      entered)
                         A1
B1
                                            (entered)
                                            (entered)
[[ HASH TABLE ]]
            10 : input1
Hash Code
            11
Hash Code
                 data
Hash Code
            20
                 X12
            24
Hash Code
               : team13
Hash Code
            33
                 data0ne
Hash Code
                : hashtable
            41
Hash Code
            47
                 Α1
            48
                 B1
Hash Code
Hash Code
            60:
                 compiler
Hash Code
            61
                  input
            70
                 indentifier ×1
Hash Code
            95
Hash Code
                 abc
            97
                 a12
Hash Code
<85 characters are used in the string table>
```

[13조] 김서영, 김효진, 서지원	원, 손효원		
[Including	some errors	in the inpu	ut data file]

<input_error_1>

```
identifier
Index in ST
                                           (entered)
                         s00oo
                         *64ks1
..Error...
                                           * is not allowed
                                           (entered)
                         slkjf
"""sf5ef6sef"""
..Error...
                                                       is not allowed
                         45k1ksa
..Error...
                                           start with digit
                         ekfs
   13
                                            (entered)
   18
                         g873s1k
                                           (entered)
..Error...
                         toooooooolooooong38w34t4
                                                             too long identifier
   26
                         slkeif
                                            (entered)
    0
                                            (already existed)
                         Soo0o -
   33
                         Digit
                                            (entered)
   39
                         Hashs
                                            (entered)
   45
                         00000oover
                                                    (entered)
                                           ^ is not allowed
..Error...
                         elkif^se
                         neXtfRee
   56
                                           (entered)
                                                      is not allowed
                         ekjfs15e7^
..Error...
   65
                                           (entered)
                         exIT
   70
                         skdiflkie89w
                                                     (entere<mark>d</mark>)
   83
                         baNana
                                            (entered)
   90
                         aPp1E
                                            (entered)
   96
                         Grape
                                            (entered)
  102
                         eNTrY
                                            (entered)
  108
                         K
                                            (entered)
[[ HASH TABLE ]]
Hash Code
             8 : K
            10 : baNana
Hash Code
Hash Code
            11
               : 00000oover
Hash Code
            26
                 ekfs
Hash Code
            28
                 Grape
Hash Code
            30
                 Digit
Hash Code
            31
                 aPplE
Hash Code
            36
                 Hashs
Hash Code
            39
                 slkif
Hash Code
            40
                 slkeif
Hash Code
            43
                 exIT
            55
Hash Code
                 s0000
            63
Hash Code
                 eNTrY
Hash Code
            66
                 neXtfRee
            85
Hash Code
                 skdjflkje89w
Hash Code
            96 :
                 g873slk
<110 characters are used in the string table>
```

<input_error_2>



<input_error_3>

```
identifier
Index in ST
     0
                        TeXt
                                         (entered)
     5
                        me
                                         (entered)
     8
                        MErry
                                         (entered)
                        cHriStam@s
...Error...
                                                 @ is not allowed
                        let
                                         (entered)
    14
    5
                        Me
                                         (already existed)
    18
                                         (entered)
                        know
   23
                        You
                                         (entered)
                        3ARE
...Error...
                                 start with digit
   27
                        jUst
                                         (entered)
    32
                                         (entered)
                        а
   34
                                         (entered)
                        word
...Error...
                        %r
                                         % is not allowed
                                         ^ is not allowed
                        T^0
...Error...
                                         (entered)
    39
                        of
                        text
                                         (already existed)
    0
...Error...
                        8from
                                 start with digit
   23
                        y0U
                                         (already existed)
    42
                        will
                                         (entered)
                        Remind
    47
                                         (entered)
    5
                        mΕ
                                         (already existed)
                                          ' is not allowed
                        you're
...Error...
                                         (entered)
    54
                        stILL
   60
                        thEre
                                         (entered)
...Error...
                        youdonthavetoaddmuchtoit
                                                      too long identifier
 [[ HASH TABLE ]]
Hash Code
            11 : me
Hash Code
            14: of
Hash Code 26: let
Hash Code 37: thEre
Hash Code 40 : Remind
           41 : will
Hash Code
Hash Code 45: word
Hash Code 48: know
Hash Code 50 : You
Hash Code 53 : stILL
Hash Code 54 : TeXt
Hash Code 55 : jUst
Hash Code 60: MErry
Hash Code
            98 : a
<66 characters are used in the string table>
```

<input_error_4>

```
Index in ST
                          identifier
    0
                          abc
                                            (entered)
    4
                          a12
                                             entered)
                          input
                                             entered)
   14
                          input1
                                             entered)
   21
                          data
                                             entered)
   26
                          data0ne
                                             entered)
   34
                          \times 1
                                             entered)
                          Ŷi2
   37
                                             entered)
   41
                          team13
                                             entered)
   48
                          compiler
                                            (entered)
   57
69
                          indentifier
                                                      (entered)
                          hashtable
                                                      (entered)
   79
                                             entered)
                          Α1
   82
                          В1
                                            (entered)
..Error...
                          12A
                                   start with digit
   79
                                            (already existed)
                          a1
 .Error...
                          26
                                   start with digit
   85
                          error
                                            (entered)
   85
                          Error
                                            (already existed)
[[ HASH TABLE ]]
Hash Code
            10 : input1
Hash Code
            11
                 data
            20
                 X12
Hash Code
Hash Code
            24
                  team13
            33
Hash Code
                 data0ne
Hash Code
            41
                : hashtable
Hash Code
            47
                  Α1
            48
                : B1
Hash Code
            55
Hash Code
                 error
            60
Hash Code
               : compiler
Hash Code
            61
                  input
            70
Hash Code
                  indentifier x1
            95
Hash Code
                  abc
               : a12
Hash Code
            97
<91 characters are used in the string table>
```