

Μεταγλωτιστές 2018

Προγραμματιστική εργασία #1

Ονοματεπώνυμο: Ηλέκτρα Βλάχου

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A) Το αυτόματο DFA που προκύπτει από την εκφώνηση της εργασίας:

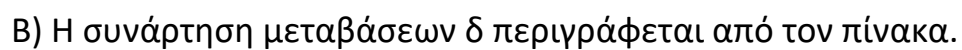
$Q = \{q_0, q_1, q_2, q_3, q_4, q_5, q_6, q_7\}$ (οι καταστάσεις μας)

$\Sigma = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, ., : \}$ (τα σύμβολα μας)

$\Delta = Q \times \Sigma \rightarrow Q$

q_0 είναι η εναρκτήρια κατάσταση

$F = \{q_6\}$

[illegible]

Γ) Στο Γ ερώτημα έχουμε να ορίσουμε τις καταστάσεις.

Ως κατάσταση αποδοχής ορίζουμε την q6 η TIME_TOKEN.

Ενώ ως ERROR_TOKEN ορίζονται οι καταστάσεις q1 για τιμές {0,1,2,3,4,5,6,7,8,9} , η καταστάσεις q0,q2,q5 για τιμές { , : } , για την κατάσταση q3 η τιμές {4,5,6,7,8,9} και η κατάσταση q4 για τις τιμές {5,6,7,8,9,.,:} και q7 {0,.,:}

Δ) Ο κώδικας που θα πρέπει να εισάγουμε είναι ο ακόλουθος.

Αντικαταστήστε με το δικό σας λεξικό μεταβάσεων...

```
td = { 'q0':{ '0': 'q7', '1': 'q2', '2': 'q3', '3': 'q1', '4': 'q1', '5': 'q1', '6': 'q1', '7': 'q1',  
'8': 'q1', '9': 'q1', ' ': 'q8', ' ': 'q8' },
```

```
      'q1':{ '0': 'q8', '1': 'q8', '2': 'q8', '3': 'q8', '4': 'q8', '5': 'q8', '6': 'q8', '7': 'q8',  
'8': 'q8', '9': 'q8', ' ': 'q4', ' ': 'q4' },
```

```
      'q2':{ '0': 'q1', '1': 'q1', '2': 'q1', '3': 'q1', '4': 'q1', '5': 'q1', '6': 'q1', '7': 'q1',  
'8': 'q1', '9': 'q1', ' ': 'q4', ' ': 'q4' },
```

```
      'q3':{ '0': 'q1', '1': 'q1', '2': 'q1', '3': 'q1', '4': 'q8', '5': 'q8', '6': 'q8', '7': 'q8',  
'8': 'q8', '9': 'q8', ' ': 'q4', ' ': 'q4' },
```

```
      'q4':{ '0': 'q5', '1': 'q5', '2': 'q5', '3': 'q5', '4': 'q5', '5': 'q5', '6': 'q8', '7': 'q8',  
'8': 'q8', '9': 'q8', ' ': 'q8', ' ': 'q8' },
```

```
      'q5':{ '0': 'q6', '1': 'q6', '2': 'q6', '3': 'q6', '4': 'q6', '5': 'q6', '6': 'q6', '7': 'q6',  
'8': 'q6', '9': 'q6', ' ': 'q8', ' ': 'q8' },
```

```
      'q7':{ '0': 'q8', '1': 'q1', '2': 'q1', '3': 'q1', '4': 'q1', '5': 'q1', '6': 'q1', '7': 'q1',  
'8': 'q1', '9': 'q1', ' ': 'q8', ' ': 'q8' } }
```

the dictionary of accepting states and their

corresponding token

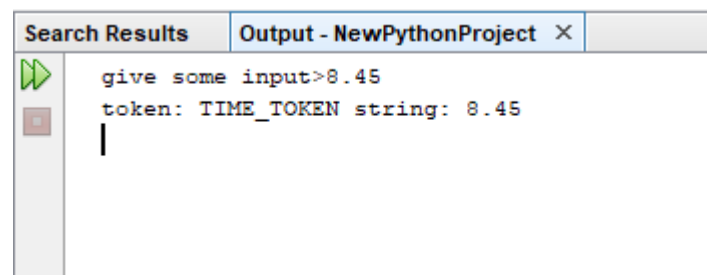
Αντικαταστήστε με το δικό σας λεξικό καταστάσεων αποδοχής...

```
ad = { 'q6': 'TIME_TOKEN',  
      'q8': 'ERROR_TOKEN' }
```

Οθόνες εκτέλεσης

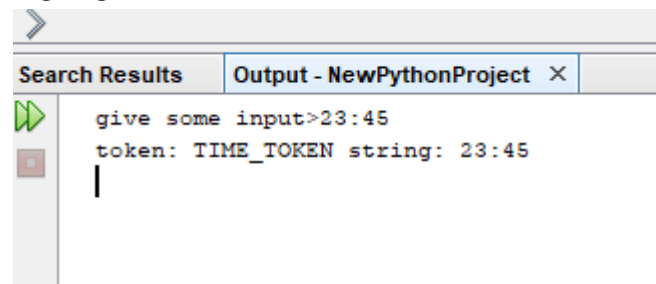
Έγκυρες

Για 8.45



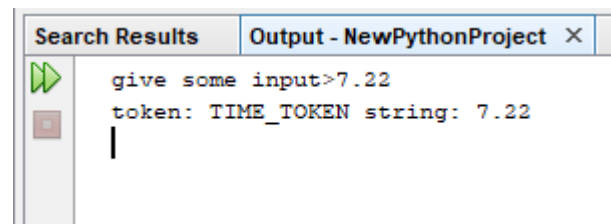
The screenshot shows a Python REPL window with two tabs: 'Search Results' and 'Output - NewPythonProject'. The 'Output' tab is active, displaying the following text: 'give some input>8.45', 'token: TIME_TOKEN string: 8.45', and a cursor on a new line.

23:45



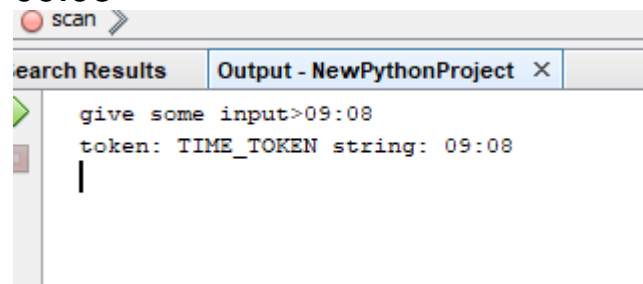
The screenshot shows a Python REPL window with two tabs: 'Search Results' and 'Output - NewPythonProject'. The 'Output' tab is active, displaying the following text: 'give some input>23:45', 'token: TIME_TOKEN string: 23:45', and a cursor on a new line.

7.22



The screenshot shows a Python REPL window with two tabs: 'Search Results' and 'Output - NewPythonProject'. The 'Output' tab is active, displaying the following text: 'give some input>7.22', 'token: TIME_TOKEN string: 7.22', and a cursor on a new line.

09:08

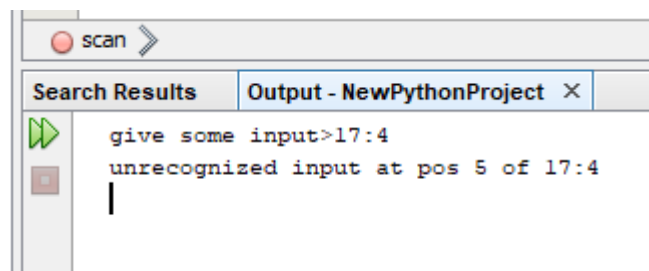


A screenshot of a terminal window. The title bar shows a red circle icon and the text "scan". Below the title bar, there are two tabs: "Search Results" and "Output - NewPythonProject" with a close button. The terminal content shows a green double arrow icon on the left, followed by the text "give some input>09:08" on the first line and "token: TIME_TOKEN string: 09:08" on the second line. A vertical cursor is positioned at the end of the second line.

```
give some input>09:08
token: TIME_TOKEN string: 09:08
|
```

Άκυρες

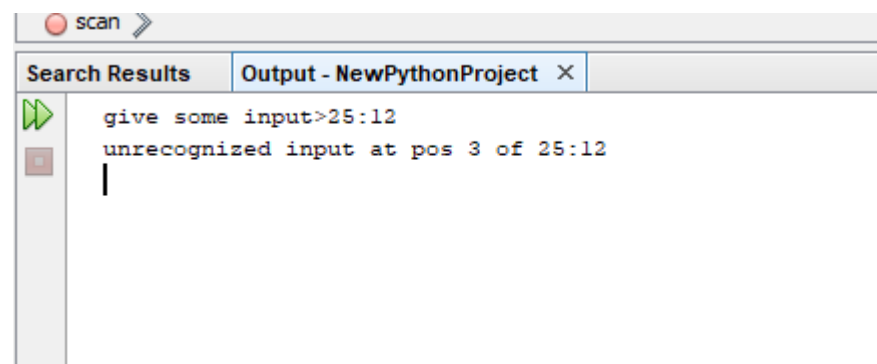
17:4



A screenshot of a terminal window. The title bar shows a red circle icon and the text "scan". Below the title bar, there are two tabs: "Search Results" and "Output - NewPythonProject" with a close button. The terminal content shows a green double arrow icon on the left, followed by the text "give some input>17:4" on the first line and "unrecognized input at pos 5 of 17:4" on the second line. A vertical cursor is positioned at the end of the second line.

```
give some input>17:4
unrecognized input at pos 5 of 17:4
|
```

25:12



A screenshot of a terminal window. The title bar shows a red circle icon and the text "scan". Below the title bar, there are two tabs: "Search Results" and "Output - NewPythonProject" with a close button. The terminal content shows a green double arrow icon on the left, followed by the text "give some input>25:12" on the first line and "unrecognized input at pos 3 of 25:12" on the second line. A vertical cursor is positioned at the end of the second line.

```
give some input>25:12
unrecognized input at pos 3 of 25:12
|
```

9:66

