

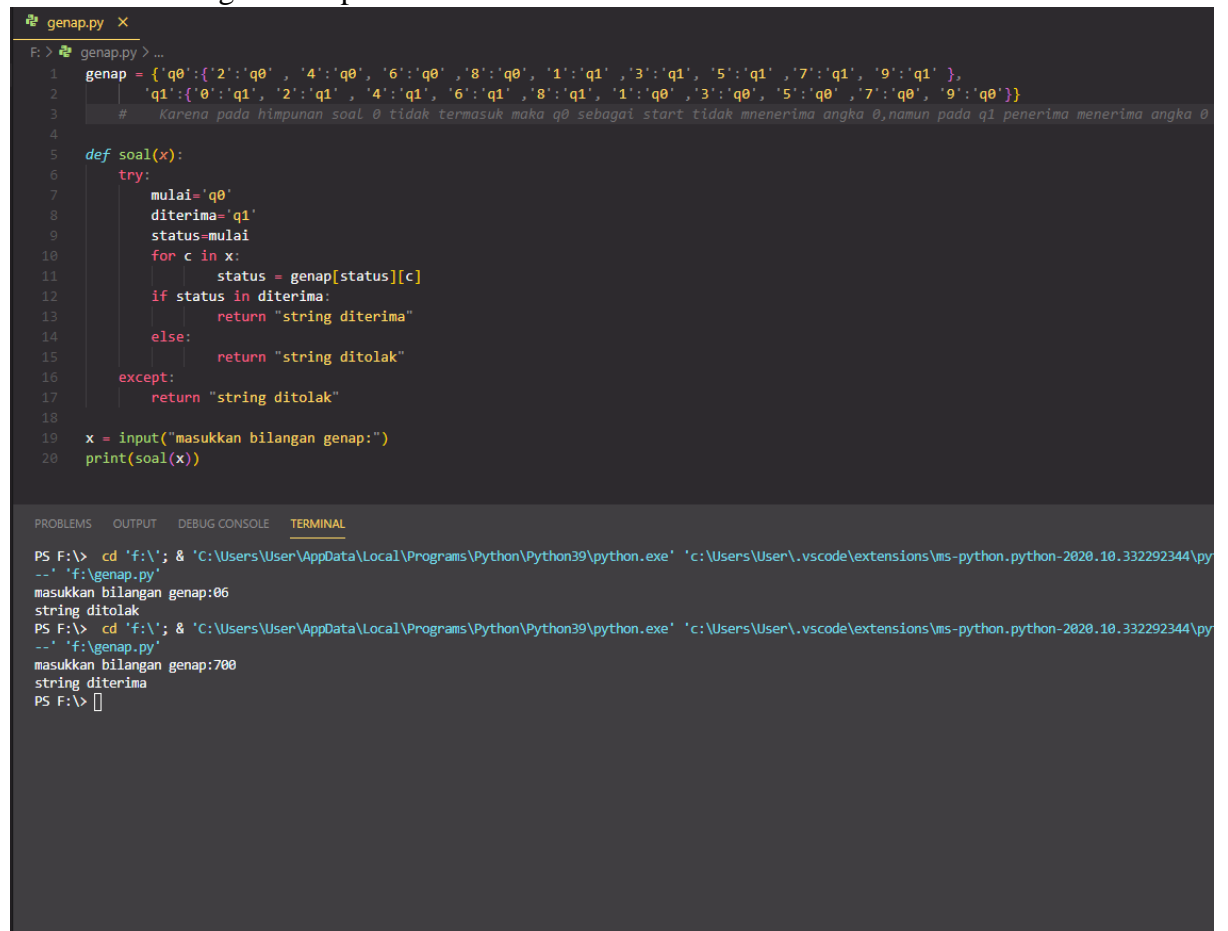
Nama Kelompok :

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Tugas : Vclass 1 Finite Automata

Dosen : ERNASTUTI, Dr

## 1. Menerima Bilangan Genap



```
genap.py X
F: > genap.py > ...
1 genap = {'q0':'2':'q0', '4':'q0', '6':'q0', '8':'q0', '1':'q1', '3':'q1', '5':'q1', '7':'q1', '9':'q1'},
2       'q1':{'0':'q1', '2':'q1', '4':'q1', '6':'q1', '8':'q1', '1':'q0', '3':'q0', '5':'q0', '7':'q0', '9':'q0'}}
3 # Karena pada himpunan soal 0 tidak termasuk maka q0 sebagai start tidak menerima angka 0, namun pada q1 penerima menerima angka 0
4
5 def soal(x):
6     try:
7         mulai='q0'
8         diterima='q1'
9         status=mulai
10        for c in x:
11            status = genap[status][c]
12            if status in diterima:
13                return "string diterima"
14            else:
15                return "string ditolak"
16        except:
17            return "string ditolak"
18
19 x = input("masukkan bilangan genap:")
20 print(soal(x))

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\py
--' 'f:\genap.py'
masukkan bilangan genap:06
string ditolak
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\py
--' 'f:\genap.py'
masukkan bilangan genap:700
string diterima
PS F:\> 
```

## 2. Menerima Bilangan Ganjil

```
1 ganjil = {'q0':{'0':'q0','2':'q0','4':'q0','6':'q0','8':'q0','1':'q1','3':'q1','5':'q1','7':'q1','9':'q1'},
2         'q1':{'0':'q0','2':'q0','4':'q0','6':'q0','8':'q0','1':'q1','3':'q1','5':'q1','7':'q1','9':'q1'}}
3
4
5 def soal(x):
6     try:
7         mulai='q0'
8         diterima='q1'
9         status=mulai
10        for c in x:
11            status = ganjil[status][c]
12            if status in diterima:
13                return "string diterima"
14            else:
15                return "string ditolak"
16        except:
17            return "string ditolak"
18
19 x = input("masukkan bilangan ganjil:")
20 print(soal(x))
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: Python Deb

Windows PowerShell  
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PS F:\> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\deb  
nap.py'  
masukkan bilangan ganjil:1201  
string diterima  
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\  
--' 'f:\genap.py'  
masukkan bilangan ganjil:1200  
string ditolak  
PS F:\> []

## 3. Menerima nama-nama Mhs Kelas

```
1 mhs= {'q0':{'A':'q1','N':'q10','B':'q5','M':'q45','Z':'q62','K':'q48','L':'q12','F':'q16','V':'q53','D':'q37','Y':'q57','R':'q26','S':'q34'},
2       'q1':{'R':'q2'}, 'q2':{'D':'q3'}, 'q3':{'I':'q4'}, #HADI
3       'q10':{'C':'q11'}, 'q11':{'I':'q4'}, #ACI
4       'q5':{'I':'q6'}, 'q6':{'L':'q7'}, 'q7':{'A':'q8','I':'q4'}, 'q8':{'L':'q9'}, #BILAL, #BILI
5       'q45':{'A':'q46'}, 'q46':{'U':'q47'}, 'q47':{'L':'q9'}, #MAUL
6       'q62':{'I':'q63'}, 'q63':{'D':'q64'}, 'q64':{'A':'q65'}, 'q65':{'N':'q66'}, #ZIDAN
7       'q48':{'A':'q49'}, 'q49':{'L':'q50'}, 'q50':{'I':'q51'}, 'q51':{'P':'q52'}, #KALIP
8       'q12':{'U':'q13'}, 'q13':{'I':'q14'}, 'q14':{'F':'q15'}, 'q15':{'I':'q4'}, #LUTFI
9       'q46':{'A':'q47'}, 'q47':{'I':'q10','R':'q23'}, 'q10':{'O':'q19','A':'q21'}, 'q19':{'N':'q20'}, 'q20':{'I':'q4'}, #FATONI
10      'q23':{'E':'q24'}, 'q24':{'L':'q25'}, #FABEL
11      'q21':{'H':'q22'}, #FATAH
12      'q53':{'I':'q54'}, 'q54':{'K':'q55'}, 'q55':{'A':'q56'}, #VIKA
13      'q37':{'A':'q38','I':'q42'}, 'q38':{'T':'q39'}, 'q39':{'U':'q40'}, 'q40':{'L':'q41'}, #DATUL
14      'q42':{'D':'q43'}, 'q43':{'I':'q44'}, #DIDI
15      'q57':{'A':'q58'}, 'q58':{'Z':'q59'}, 'q59':{'I':'q60'}, 'q60':{'D':'q61'}, #YAZID
16      'q26':{'I':'q27','A':'q33','E':'q67'}, 'q27':{'F':'q28','Z':'q31','S':'q32'}, 'q28':{'Q':'q29'}, 'q29':{'Y':'q30'}, #RIFQY, #RIS, #RIZ
17      'q31':{'Y':'q30'}, #RAFI
18      'q67':{'K':'q68'}, #REK
19      'q34':{'I':'q35'}, 'q35':{'S':'q36'}, 'q36':{'Y':'q30'}, #SISY
20      }
21
22 def mulai(x):
23     try:
24         mulai='q0'
25         diterima='q6','q7','q9','q66','q52','q26','q25','q22','q56','q41','q44','q61','q30','q31','q32','q68']
26         status=mulai
27         for c in x:
28             status = mhs[status][c]
29             if status in diterima:
30                 return "String diterima"
31             else:
32                 return "String ditolak"
33         except:
34             return "String ditolak"
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: Python Deb

PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debuggy\launcher' '53081' '--' 'f:\nama\_kelas.py'  
masukkan nama:RAY  
String diterima  
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debuggy\launcher' '53087' '--' 'f:\nama\_kelas.py'  
masukkan nama:ANDI  
String diterima  
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debuggy\launcher' '53087' '--' 'f:\nama\_kelas.py'  
masukkan nama:RIFQY  
String diterima  
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debuggy\launcher' '53087' '--' 'f:\nama\_kelas.py'  
masukkan nama:HARUKA  
String ditolak  
PS F:\> []

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#### 4. Menerima (ab)<sup>n</sup>

```
ab^n.py X
F:\> ab^n.py > soal
1
2
3 A = {'q0':{'a':'q1'},'q1':{'b':'q0'}}
4
5 def soal(x):
6     try:
7         mulai='q0'
8         diterima='q0'
9         status=mulai
10        for c in x:
11            status = A[status][c]
12            if status in diterima:
13                return "string diterima"
14            else:
15                return "string ditolak"
16        except:
17            return "tolak"
18
19 x = input("masukkan string:")
20 print(soal(x))

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' -- 'f:\ab^n.py'
masukkan string:abababababab
string diterima
PS F:\>
```

#### 5. Menerima 01(ab)<sup>n</sup>10

```
01ab^n10.py X
F:\> 01ab^n10.py > mulai
1 string= {'q0':{'0':'q1'},'q1':{'1':'q2'},'q2':{'a':'q3'},'q3':{'b':'q4'},
2         'q4':{'a':'q3'},'1':'q5'},'q5':{'0':'q6'}}
3
4 def mulai(x):
5     try:
6         mulai='q0'
7         diterima='q6'
8         status=mulai
9         for c in x:
10            status = string[status][c]
11            if status in diterima:
12                return "String diterima"
13            else:
14                return "String ditolak"
15        except:
16            return "String ditolak"
17
18 x = input("masukkan string:")
19 print(mulai(x))

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debugpy\launcher' '51443'
-- 'f:\01ab^n10.py'
masukkan string:01ababab10
String diterima
PS F:\> cd 'f:\'; & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2020.10.332292344\pythonFiles\lib\python\debugpy\launcher' '51449'
-- 'f:\01ab^n10.py'
masukkan string:01abbaabab10
String ditolak
PS F:\>
```

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