Parser–LL(1) code:-

```
"""
Created on Sun Apr  3 23:02:50 2022

@author: COMPUTER
"""

# -*- coding: utf-8 -*-
"""
Created on Mon Mar 28 05:58:14 2022

@author: COMPUTER
"""

import re
r=int(input("Enter no. of non-terminals: "))
c=int(input("Enter no. of terminals: "))+1
non=[]
ter=[]
table=[]
stack=['$','S']
ptr=0

print("Enter non-terminals")
for i in range(r):
    non.append(input( ))

print('Enter terminals')
for i in range(c-1):
    ter.append(input())
ter.append('$')

print('Enter productions for: ')
temp_list=[]
```
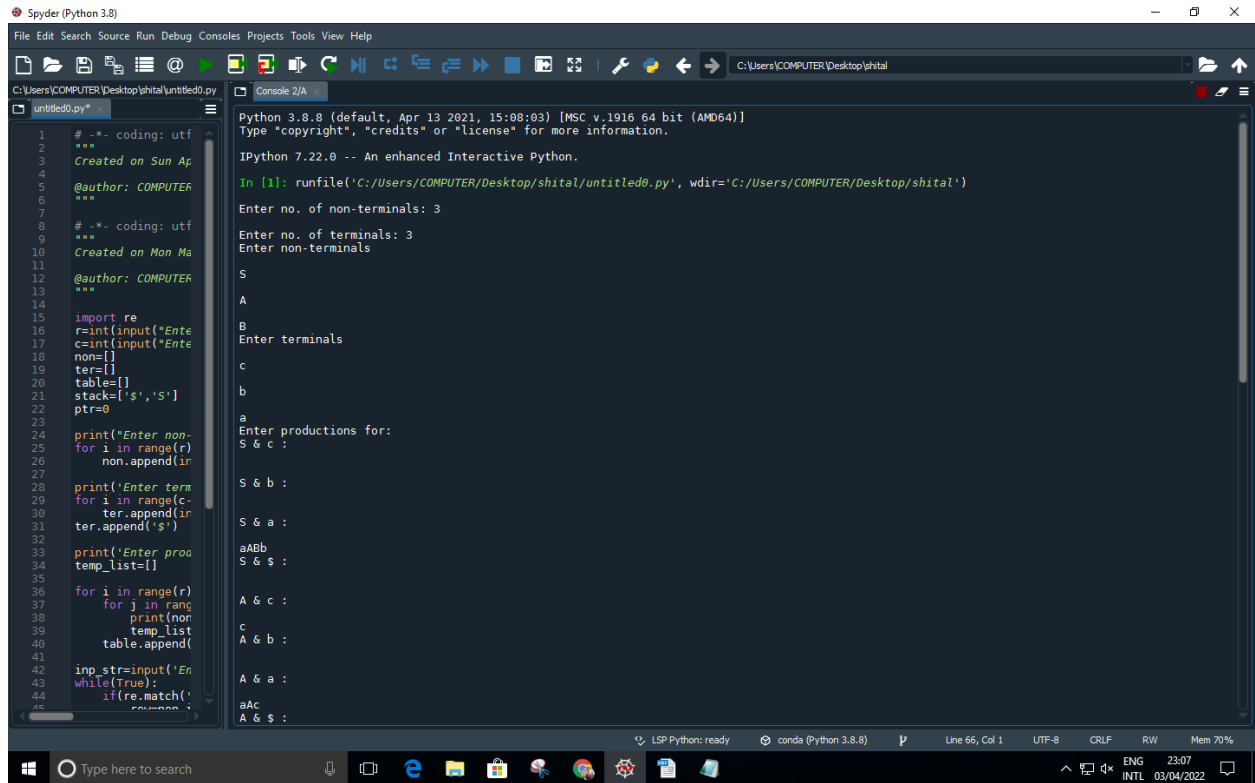
```python
for i in range(r):
    for j in range(c):
        print(non[i],'&',ter[j],':')
        temp_list.append(input( ))
    table.append(temp_list)

inp_str=input('Enter string to parse:')+'$'
while(True):
    if(re.match('[A-z]',stack[-1]) and inp_str[ptr]!='$'):
        row=non.index(stack.pop())
        col=ter.index(inp_str[ptr])

        if(table[row][col]!='*'):
            temp = table[row][col][::-1]
        while(temp!=''):
            stack.append(temp[0])
            temp=temp.replace(temp[0],'')
        if(stack[-1] == inp_str[ptr] and inp_str[ptr]!='$'):
            ptr=ptr+1
            stack.pop()
        if(stack[-1]=='$'):
            if(inp_str[ptr]=='$'):
                print('String is accepted')
                break
        else:
            print('String is not accepted')
            break
    elif(inp_str[ptr] == '$'):
        print('String is not accepted')
        break
```

Output:-

```
B
Enter terminals

c

b

a
Enter productions for:
S & c :


S & b :


S & a :

aABb
S & $ :


A & c :

c
A & b :


A & a :

aAc
A & $ :


B & c :

c
B & b :

bB
B & a :

|
```

```
# -*- coding: utf
"""
Created on Sun Ap
@author: COMPUTER
"""

# -*- coding: utf
"""
Created on Mon Ma
@author: COMPUTER
"""

import re
r=int(input("Ente
c=int(input("Ente
non=[]
ter=[]
table=[]
stack=['$','S']
ptr=0

print("Enter non-
for i in range(r)
    non.append(in

print('Enter term
for i in range(c-
    ter.append(in
ter.append('$')

print('Enter prod
temp_list=[]

for i in range(r)
    for j in rang
        print(non
        temp_list
    table.append(

inp_str=input('En
while(True):
    if(re.match('
```