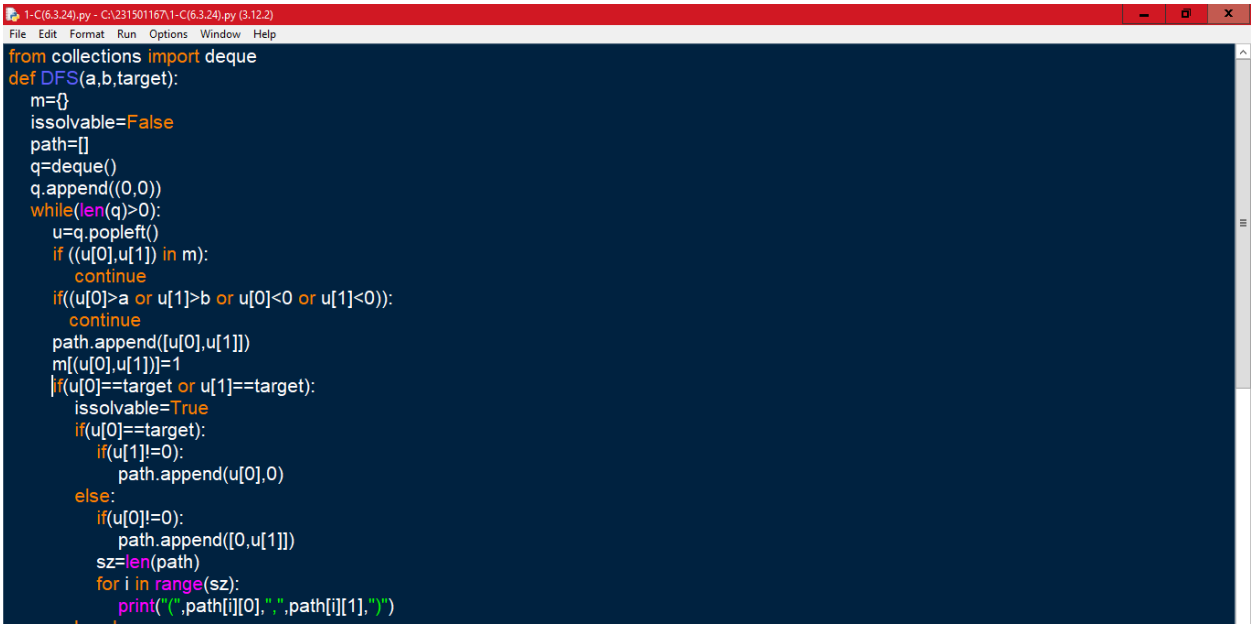
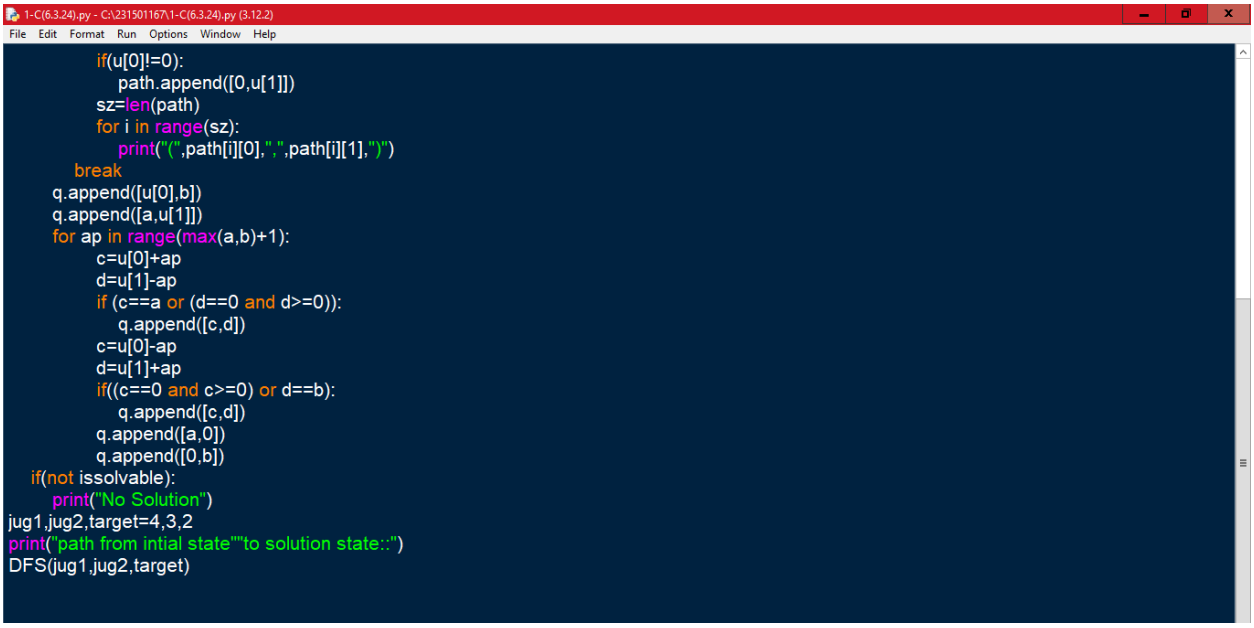
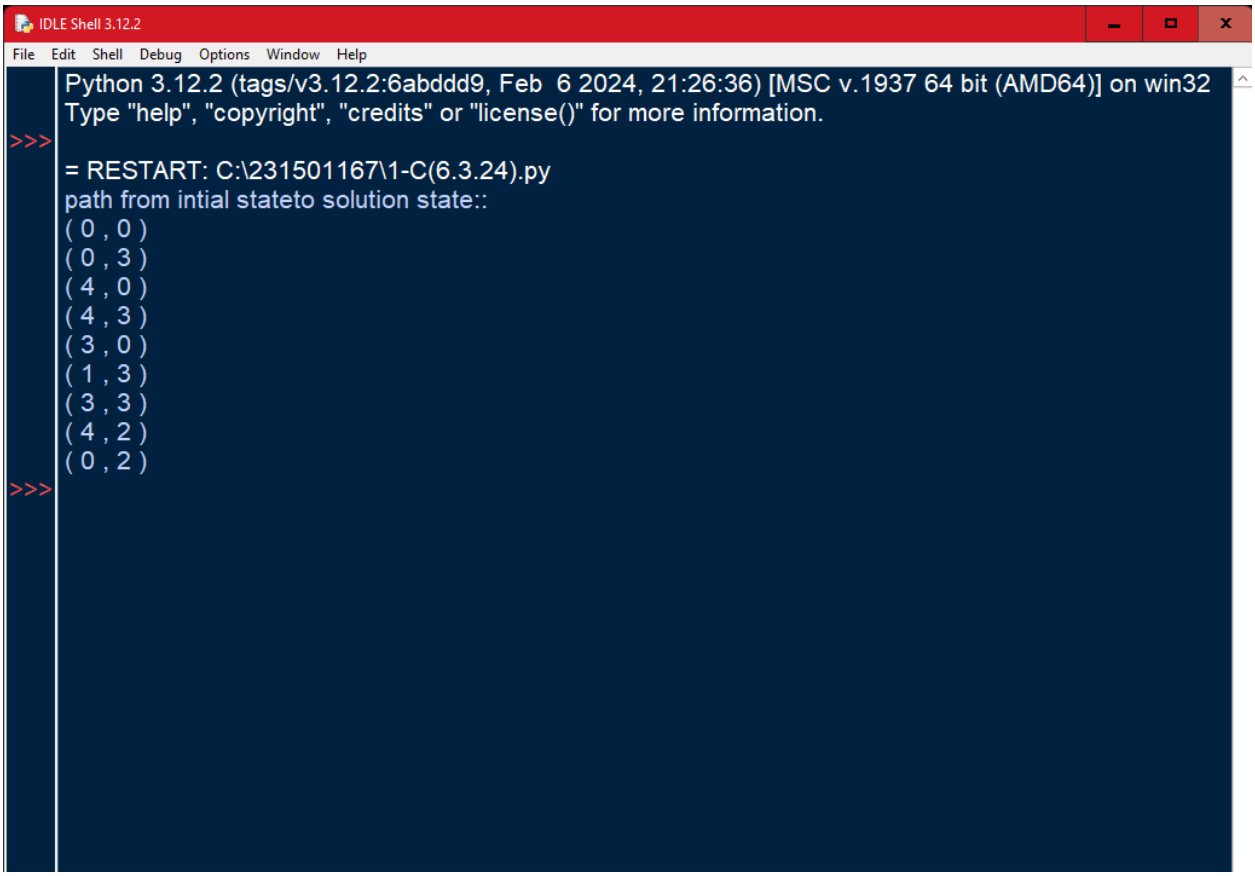

1-C(6.3.24).py - C:\231501167\1-C(6.3.24).py (3.12.2)
File Edit Format Run Options Window Help
from collections import deque
def DFS(a,b,target):
m={}
issolvable=False
path=[]
q=deque()
q.append((0,0))
while(len(q)>0):
u=q.popleft()
if ((u[0],u[1]) in m):
continue
if((u[0]>a or u[1]>b or u[0]<0 or u[1]<0)):
continue
path.append([u[0],u[1]])
m[(u[0],u[1])]=1
if(u[0]==target or u[1]==target):
issolvable=True
if(u[0]==target):
if(u[1]!=0):
path.append(u[0],0)
else:
if(u[0]!=0):
path.append([0,u[1]])
sz=len(path)
for i in range(sz):
print("(",path[i][0],",",path[i][1],")")


1-C(6.3.24).py - C:\231501167\1-C(6.3.24).py (3.12.2)
File Edit Format Run Options Window Help
if(u[0]!=0):
path.append([0,u[1]])
sz=len(path)
for i in range(sz):
print("(",path[i][0],",",path[i][1],")")
break
q.append([u[0],b])
q.append([a,u[1]])
for ap in range(max(a,b)+1):
c=u[0]+ap
d=u[1]-ap
if (c==a or (d==0 and d>=0)):
q.append([c,d])
c=u[0]-ap
d=u[1]+ap
if((c==0 and c>=0) or d==b):
q.append([c,d])
q.append([a,0])
q.append([0,b])
if(not issolvable):
print("No Solution")
jug1,jug2,target=4,3,2
print("path from intial state""to solution state::")
DFS(jug1,jug2,target)


IDLE Shell 3.12.2
File Edit Shell Debug Options Window Help
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\231501167\1-C(6.3.24).py
path from intial stateto solution state::
(0 , 0)
(0 , 3)
(4 , 0)
(4 , 3)
(3 , 0)
(1 , 3)
(3 , 3)
(4 , 2)
(0 , 2)
>>>