	Date:
Exp3:	
Aim to implement	a DF'S program to solve water jug problem
graphenin ingle debies sid data spins statements to reason and the spins of the second	The state of the s
	William District to the second of the second
Step1: Stept	queue foi BIS. Create a let Vierted to
10tial State (0.0)	ishere the both rugs are empty
Atop3: While or	10110 is empty. Described the front Reto
(x, y) where x is the	amount of water in jug 1 and y is the
anought of world	(n hud 2
Step 4 infeither 2	== target or y == targed than Solution is
found . If the Storte	x, y has been visited before Ship to
More Heration. Mark	the Hote (x, y) as Vilited
Clast. Low for	shows state (x, y) generate all powor
nest states by DAM	ying. till fry 1. (1,9) the full
antel tool 1: 10.	CMM TUST Z( ~ 10)
Step 6: pour water	1 from my 1 to my 2: with capacity
Jug 2 Drown weder	from Jug 2 to Jug 1: with Capacity of
fig !	
0 (	polution: If the Queue is exhausted and een reached, print 1 Solution in at propriété
Step 7 Check for	solution in a possible
the target have no	sen seamed I
Step 8: Stop	
04ep 8. 31cp	1 (
	7
·	
the contract of the contract o	· State of the sta

Date :	
CODE:	The second second
from Collection import degreens	And the second s
from Collection import dequale def bolution (a, b, taiget):	and the second second second
= 97	Andreas and Andrea
is Soluable = false	egyer friedrich aus de digener fi behatigen de de en
Path = CJ	
o's of a come a = dique () & a como of so	
((0,0))	the state of the s
in a while len (q) >0	
U=VPop(J+U)	
if(uCoJ, uCiJ) in m:	
Continues of a house of	
if lucossa or ucisto or ucisto	0)
Continue	P
Poth append (a Co) u (i)	
ricucoj, ucij =1	
it (ulo] = = touget or ul] = = toug	et:
igholuable = True	*
if u(o) ==torget	
if u(j) = 0:	
· gath-append (Cu[o].o])	
if uCoJI=0	The second secon
rath append (CO, UTI)	Ç
an Cath)	•
for i in varye (Si):	
for i in range (Si):  Perint ("(", Path (ITO)).	<
break	
9 append ((u(o], b])	
9 append (Cu(i), a)	
9 append (Cu(i], a]) to ap in sarox (max (a,b)-1). (-u(6) +ap	
(= 4 COJ + ap	CP year old a copy from controller from the left or \$500 to controller for the
•	

d- UCJ -ap 1.f(==a 0x(d==0 anddx=0). a append (Carda). 'C= acol-ap 1 = Ulij +ap If ( c==0 and ( y=0) or d==b. append ((a, o)) it not is solvable. Print ("hot possible") if name == 1 main ! dug 1 = int (input (" Coip Jug 17")).

Jug 2 = int (input ("Coip Jug 27"))

Jarget = int (input (" Farget amount ""))

Paint ("Poeth of the bolubion")

Pollubion (Jug 1, Jug 2, karget). Dutput Cap of Jug 1 = 4

Cap of Jug 2 = 3:

Tarqui amount = 2

Path from the inital to Polution grate (0, 0) (3,3)(0,3) (4,2)(4,3)RESULT: fog problem i implemented and Output rentral