In [1]:

```
limit1=int(input("Enter limit of first jug"))
limit2=int(input("Enter limit of second jug"))
aim=int(input("Enter aim:- "))
print("intial state"+"0 0")
print("Goal state"+"0 "+str(aim))
if(limit1>limit2):
    limit1,limit2=limit2,limit1
def waterJug(x,y):
    print(str(x)+" "+str(y))
    if(y==aim):
        return
    elif(y==limit2):
        waterJug(0,x)
    elif(y==0 and x!=0):
        waterJug(0,x)
    elif(x==aim):
        waterJug(x,0)
    elif(x<limit1):
        waterJug(limit1,y)
    elif(x+y<=limit2):
        waterJug(0,x+y)
    elif(x+y>limit2):
        waterJug(x-(limit2-y),limit2)

waterJug(0,0)
```

```
Enter limit of first jug4
Enter limit of second jug3
Enter aim:- 2
intial state0 0
Goal state0 2
0 0
3 0
0 3
3 3
2 4
0 2
```