

In [1]:

```
# Roll No : 3301
# Name : Nupur Mahesh Agrawal
# Batch A
# Problem Statement : Write a program for Water jug problem
```

In [2]:

```
max1 = int(input("Enter the capacity of Jug1: "))
max2 = int(input("Enter the capacity of Jug2: "))
fill = int(input("Enter the capacity to be filled: "))
def pour(jug1,jug2):
    print("%d\t%d" % (jug1,jug2))
    if(jug2==fill):
        return
    elif jug1 !=0 and jug2==0:
        pour(0,jug1)
    elif jug2 ==max2:
        pour(0,jug1)
    elif jug1==fill:
        pour(jug1,0)
    elif jug1 < max1:
        pour(max1,jug2)
    elif jug1 < (max2-jug2):
        pour(0,jug1+jug2)
    else:
        pour(jug1-(max2-jug2), (max2-jug2)+jug2)
print("jug1\tjug2")
pour(0,0)
```

Enter the capacity of Jug1: 3
Enter the capacity of Jug2: 4
Enter the capacity to be filled: 2

jug1	jug2
0	0
3	0
0	3
3	3
2	4
0	2

In []: