

In [1]: *# Water jug problem*

```
def pour(jug1, jug2):
    max1, max2, fill = 5, 7, 4 #Change maximum capacity and final capacity
    print("%d\t%d" % (jug1, jug2))
    if jug2 is fill:
        return
    elif jug2 is max2:
        pour(0, jug1)
    elif jug1 != 0 and jug2 is 0:
        pour(0, jug1)
    elif jug1 is 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(5, 3)
```

JUG1	JUG2
5	3
1	7
0	1
5	1
0	6
5	6
4	7
0	4

In []: