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(0, 0)**