```
 9  #problem 6
10          li s1, 6                # s1 = a = 6    (a is a variable)
11          li s2, 1                # s2 = i = 1    (given in problem)
12                                  # S3 = j = 0
13          li s4, 1                # s4 = r = 1
14          li s5, 0x55AABB33       # s5 = 0x55AABB33
15
16          beq x0, x0, outtertest  # start the loop by first testing condition
17  oloop:  li s3, 0                # reset j to 0
18          beq x0, x0, innertest   # start the inner loop by testing j < i
19  iloop:  add t0, s3, s5          # j + 0x55AABB3
20          xor s4, s4, t0          # r ^= (j + 0x55AABB33)
21          addi s3, s3, 1          # increment j by 1
22  innertest:
23          blt s3, s2, iloop       # if j < i, repeat inner loop
24          addi s2, s2, 1          # increment i by 1
25  outtertest:
26          blt s2, s1, oloop       # if i < a, repeat outter loop
27
```