

rx 9, 7

def R(v):

m = len(v) - 1

for i in range(m):

V[i] = 0

while S > 1:

V[i] += 1 * S

S //= 2

$O(\log m) = \log m$

rx 9, 8

def fuse(t1, t2):

if len(t1) == 0:

return t2

elif len(t2) == 0:

return t1

elif t1[0] < t2[0]:

return [t1[0]] + fuse(t1[1:], t2)

else:

return [t2[0]] + fuse(t1, t2[1:])

$m_2 + (m_2 - 1) + (m_2 - 2) \dots$

$= m_1 + (m_1 - 1) + (m_1 - 2) \dots$

$O(m_1^2)$

$O(m_1^2 + m_2^2)$