CSE 331 – HW 1

Total cycles for all 3 types;

R → $2 \cdot 50 \cdot 10^6 = 10 \cdot 10^7$ cycles

I → $4 \cdot 30 \cdot 10^6 = 12 \cdot 10^7$ cycles

J → $3 \cdot 20 \cdot 10^6 = 6 \cdot 10^7$ cycles

The type which has more cycle is execute slower than other types. So I type has $12 \cdot 10^7$ cycles. So I want to speed up this type for speeding program most. then $12 \cdot 10^7 / 2 = 6 \cdot 10^7$ cycle has I type when we speed up %50.

Before upgrade total cycles. = $28 \cdot 10^7$ cycles

After upgrade total cycles = $22 \cdot 10^7$ cycles

So $\frac{28 \cdot 10^7}{22 \cdot 10^7} = 1,27$ the program is improved X 1,27 times