

2.6

$$1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{N}$$

$$= \int_1^N \frac{1}{x} dx$$

$$= [\log |x|]_1^N$$

$$= \log N - \log 1$$

$$= \log N$$

$$t, z O(\log N)$$