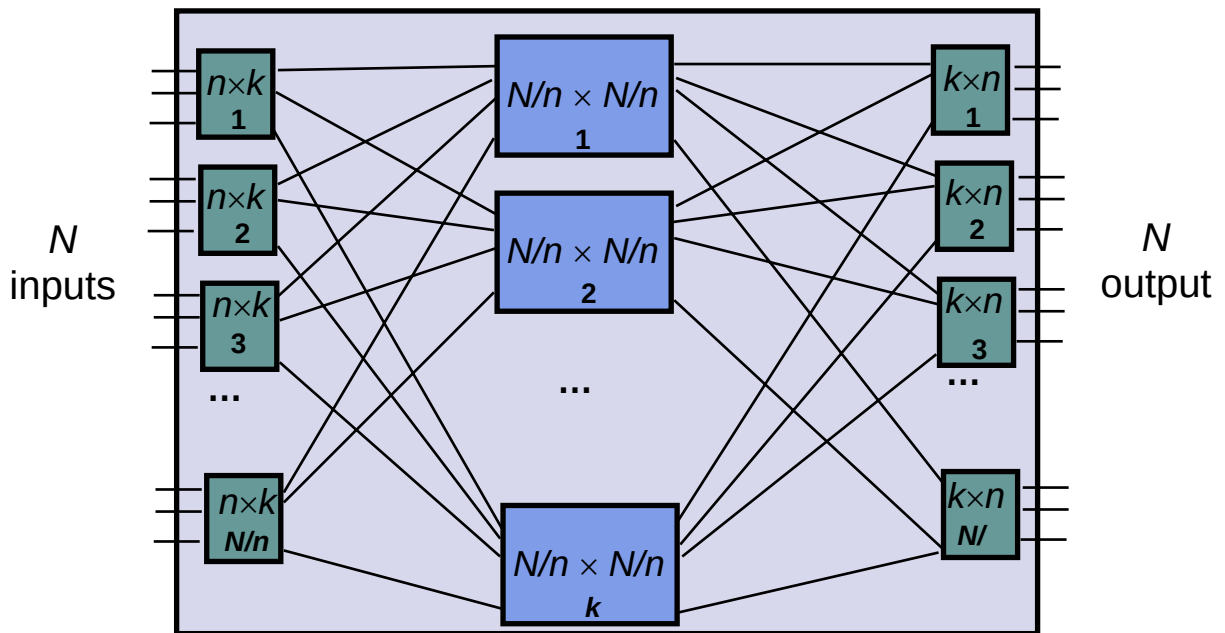




In the above 3-stage switch with $N=32$, $n=4$, and $k=8$, an input line is busy 10% of the time. Assume traffic is uniformly distributed across all inputs. Estimate the percent of time p that a line between the first and second stage is busy.

To be non-blocking, $k \geq 2n-1$; so this is non-blocking. $P = (n/k) \cdot 10\% = 5\%$.