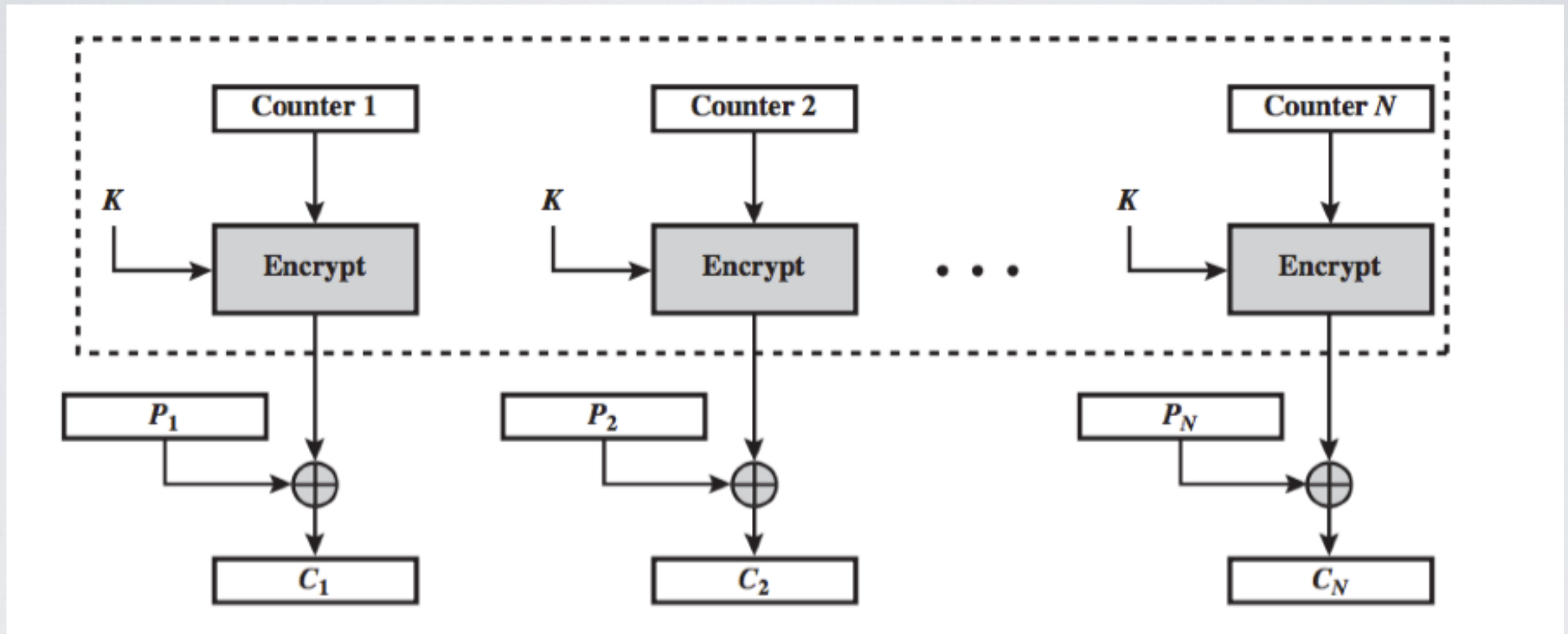


# CTR - Counter



Introduce some randomness using a counter

✓ High entropy and parallelism

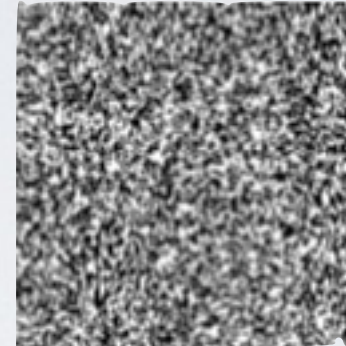
⦿ Sensitive to key-reused attack

➡ Popular usage : IPsec (coming soon in this course)

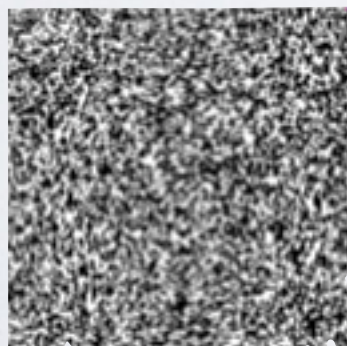
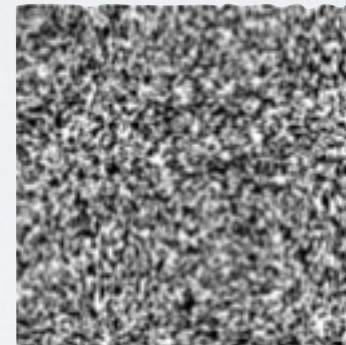
# Key-reused attack on CTR



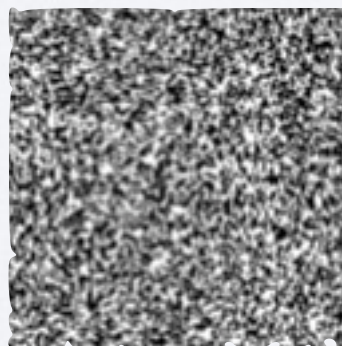
$$\oplus K =$$



$$\oplus K =$$



$$\oplus$$



$$=$$

