

This segment: given $0 < s \leq 2^n$, build a PRP on $\{0, \dots, s-1\}$

from a secure PRF $F: K \times \{0,1\}^n \rightarrow \{0,1\}^n$ (e.g. AES)

Then to encrypt a credit card number: (s = total # credit cards)

1. map given CC# to $\{0, \dots, s-1\}$
2. apply PRP to get an output in $\{0, \dots, s-1\}$
3. map output back a to CC#