

HWSEC Graded A Tut-1

10.3.22

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23CS91R14

Hypothesis table→ We know $k_{n-1} = 1$ then $k_{n-2} = 0$ or 1

$X \backslash k_{n-2}$	0	1
0	r_0 for $k_{n-2} = 0$	r_0 for $k_{n-2} = 1$
1		

→ 0 for $i = n-1$ in algo

$$R_0 = (R_0 \times R_1) \bmod N$$

$$R_1 = (R_0)^{-1} \bmod N$$

→ for $i = n-2$ in algoif $k_{n-2} = 0$ → We know the real power trace at $i = n-2$ th iteration

↳ A column in Real trace table

→ Now we correlate each 2 columns in Hypo trace with $(n-2)$ th column of Real trace [it is likely to be the highest one]

$$R_1 = (R_0 \times R_1) \bmod N$$

$$R_0 = (R_0)^{-1} \bmod N$$

if $k_{n-2} = 1$

$$R_0 = (R_0 \times R_1) \bmod N$$

$$R_1 = (R_1)^{-1} \bmod N$$

$$R = R_0$$

$$\text{Hypo trace}[i, k] = \text{HW}(R)$$

notes

Phone

email

website

2018
28
29
30
31

			06/2018		
Monday	-	4	11	18	25
Tuesday	-	5	12	19	26
Wednesday	-	6	13	20	27
Thursday	-	7	14	21	28
Friday	1	8	15	22	29
Saturday	2	9	16	23	30
Sunday	3	10	17	24	-

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the formula for correlation :

$$\sum_{i=0}^{10} \text{Hypotrace}[i-1, k_{n-2}] - \text{mean}(\text{Hypotrace}[i-1])$$

$$\times \sum_{i=1}^{10} \text{Realttrace}[i-1, k_{n-2}] - \text{mean}(\text{Realttrace}(i-1))$$

$$\sum_{i=0}^{10} (\text{Hypotrace}[i-1, k_{n-2}] - \text{mean}(\text{Hypotrace}[i-1, k_{n-2}]))$$

$$\times \sum_{i=1}^{10} (\text{Realttrace}[i-1, k_{n-2}] - \text{mean}(\text{Realttrace}(i-1, k_{n-2})))$$

= Correlation matrix [~~0~~ k_{n-2}]

the Highest data in correlation matrix will
give k_{n-2}