

Nirbhay Sharma (B19CSE114)

Assignment-2 - Cryptography

---

1.a

Given:

$$G(s) : [0, 1]^m \rightarrow [0, 1]^n : m < n$$

$$1 + 2$$

$$G(s) : [0, 1]^m \rightarrow [0, 1]^n : m < n$$

$$\wedge$$

$$\oplus$$

$$\geq$$

1.b

1.c

1.d

$$[0, 1]^m \rightarrow [0, 1]^n$$
$$[0, 1]^n$$

$$Pr[D(r) = 1] = \frac{2^n}{2^{2n}} = \frac{1}{2^{3n}}$$

$$\text{so } |Pr[D(G_4(s)) = 1] - Pr[D(r) = 1]| = |1 - \frac{1}{2^n}| > \epsilon$$

$$\sum_1^2 (t_i + x_i) = 5 + 1$$

$$(x+y) \, [x+y] \, \{x+y\} \, \langle x+y \rangle \, |x+y| \, |x+y|$$

$$1\&2$$

$$1 + 2$$

$$\{x_t + y_t\} \backslash \text{textunderline} k_t$$