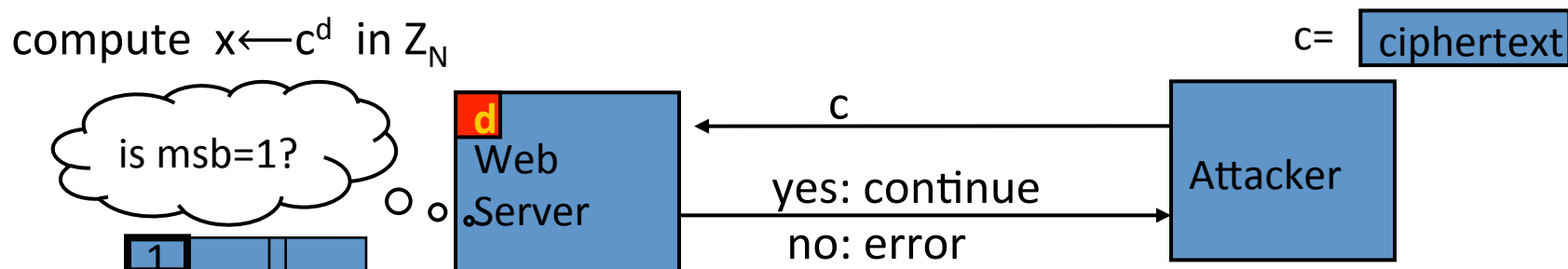


# Baby Bleichenbacher



Suppose  $N$  is  $N = 2^n$  (an invalid RSA modulus). Then:

- Sending  $c$  reveals  $\text{msb}(x)$
- Sending  $2^e \cdot c = (2x)^e$  in  $Z_N$  reveals  $\text{msb}(2x \bmod N) = \text{msb}_2(x)$
- Sending  $4^e \cdot c = (4x)^e$  in  $Z_N$  reveals  $\text{msb}(4x \bmod N) = \text{msb}_3(x)$
- ... and so on to reveal all of  $x$