

Key Authority

①. $(MPK, MSK) \leftarrow \text{Setup}(1^k)$

②ii. $SK_{ID} \leftarrow \text{KeyGen}(MSK, ID)$

②i. $ID=Mike$

②iii. $SK_{ID}=SK_{Mike}$



Mike

④. $m = \text{Dec}(c, SK_{Mike})$

③ii. c

Alice



Alice wants to send a message to Mike, and she only knows MPK.

③i. $c = \text{Enc}(MPK, ID=Mike, m)$