① $p = 13$ | Beliebige Primzahl

$g = 2$ | Beliebige Zahl $< p$

$a = 8$ | Alices secret key

$b = 5$ | Bobs secret key

$A = g^a \bmod p = 2^8 \bmod 13 = 9$ | Alice sendet dies an Bob

$B = g^b \bmod p = 2^5 \bmod 13 = 6$ | Bob sendet das an Alice

$k = B^a \bmod p = 6^8 \bmod 13 = 3$

$= k_B = A^b \bmod p = 9^5 \bmod 13 = 3$

② $p = 7$

$g = 4$

$a = 3$

$A = g^a \bmod p = 4^3 \bmod 7 = 1$ → send

received → $B = 2$

$k = B^a \bmod p = 2^3 \bmod 7 = 1$

③ $p = 5$

$g = 2$

$t = 4$

$B = g^t \bmod p = 1$

$A = 3$

$k = A^t \bmod p = 3^4 \bmod 5 = 1$

④ $p = 71$

$g = 8$

$a = 6$

$A = g^a \bmod p = 8^6 \bmod 71 = 12$

$B = 4$

$k = B^a \bmod p = 4^6 \bmod 71 = 49$