



Hellman key exchange algorithm:

1. $q=23$, $\alpha=5$, $X_a=6$, $X_b=15$ determine public key and shared key for both users using hellman key exchange algorithm.
2. $q=23$, $\alpha=9$, $X_a=4$, $X_b=3$ determine public key and shared key for both users using hellman key exchange algorithm.
3. $q=13$, $\alpha=6$, $X_a=5$, $X_b=2$ determine public key and shared key for both users using hellman key exchange algorithm.
4. $q=11$, $\alpha=2$, $X_a=8$, $X_b=6$ determine public key and shared key for both users using hellman key exchange algorithm.