**Alice message’s flag**: flAg\_th1s\_is\_th3\_aNswer\_for\_Q1

**PIN**: 0970

**The password of zip file**: Th1s\_is\_s0\_easy

**Why can crack the password from PWDCiphertext:**

Because the given information ‘a 4-digit PIN’ means the symmetric key is 4 digits numbers. Meanwhile there can be infinite to try out the password will not be frozen. So, we could generate a permutation to put all the possible keys into a list. Then use a for-loop to decrypt the password. If it went an error, the current possible key is not correct. Otherwise, we will find the correct key and print it out.