Implement the RC4 stream cipher in C++ or JAVA. User should be able to enter any key that is 5 bytes to 32 bytes long. Be sure to discard the first 3072 bytes of the pseudo random numbers. THE KEY MUST NOT BE HARD CODED IN THE PROGRAM.

Test your program with the following plain text:

<http://cms.uhd.edu/Faculty/yuans/courses/cs3326/Projects/rc4Input.txt>

Your program must be able to do both encryption and decryption. Submit the following:

1.       Source code

2.       A screen shot showing the encryption then decryption with a 5 byte key

3.       The ciphertext from the encryption, saved in hexdecimal (you may want to use the “hex” output manipulator)

4.       The plaintext from the decryption of the cipher text (you need to convert hex text to number)