

MATH 587/CSCE 557: HOMEWORK 5, DUE MAR 1.

1. The following is an English sentence encrypted by means of a Vigenere cipher.

IYMEC GOBDO JBSNT VAQLN BIEAO YIOHV XZYZY LEEVI PWOB
OEIVZ HWUDE AQALL KROCU WSWRY SIUYB MAEIR DEFYY LKODK
OGIKP HPRDE JIPWL LWPHR KYMBM AKNGM RELYD PHRNP ZHBYJ
DPMMW BXEYO ZJMYX NYJDQ WYMEO GPYBC XSXXY HLBEL LEPRD
EGWXL EPMNO CMRTG QQOUP PEDPS LZOJA EYWNM KRFBL PGIMQ
AYTSH MRCKT UMVST VDBOE UEEVR GJGGP IATDR ARABL PGIMQ
DBCWF CDFAW UWPPM RGJGN OETGD MCHIM EXTBE ENBNI CKYPW
NQBLP GIMQO ELICM RCLAC MV

- (i) Compute its index of coincidence.
- (ii) Use this to estimate the length of the keyword.
- (iii) Use Kasiski's method to estimate the length of the keyword.