Lab 1

Write a program in C (optional: C++, Java ) to read a text file and record the appearances of each 26 letters. Write the results in to a text file.

e.g the output file: ( ignore space, punctuation , case of the letter)

A: 13

B: 11

C: 24

D: 15

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2. Use the program you wrote from question 1 to find the key which was used to encrypt this message. And use the key to decrypt the message.

FEV MRIZRKZFE KF KYV JKREURIU TRVJRI TZGYVI ZJ NYVE KYV RCGYRSVK ZJ "BVPVU" SP LJZEX R NFIU. ZE KYV KIRUZKZFERC MRIZVKP, FEV TFLCU NIZKV KYV RCGYRSVK FE KNF JKIZGJ REU ALJK DRKTY LG KYV JKIZGJ RWKVI JCZUZEX KYV SFKKFD JKIZG KF KYV CVWK FI IZXYK. KF VETFUV, PFL NFLCU WZEU R CVKKVI ZE KYV KFG IFN REU JLSJKZKLKV ZK WFI KYV CVKKVI ZE KYV SFKKFD IFN. WFI R BVPVU MVIJZFE, FEV NFLCU EFK LJV R JKREURIU RCGYRSVK, SLK NFLCU WZIJK NIZKV R NFIU (FDZKKZEX ULGCZTRKVU CVKKVIJ) REU KYVE NIZKV KYV IVDRZEZEX CVKKVIJ FW KYV RCGYRSVK. WFI KYV VORDGCV SVCFN, Z LJVU R BVP FW "ILDBZE.TFD" REU PFL NZCC JVV KYRK KYV GVIZFU ZJ IVDFMVU SVTRLJV ZK ZJ EFK R CVKKVI. PFL NZCC RCJF EFKZTV KYV JVTFEU "D" ZJ EFK ZETCLUVU SVTRLJV KYVIV NRJ RE D RCIVRUP REU PFL TRE'K YRMV ULGCZTRKVJ.