

```

class Vigenere {

    @Override
    public String encrypt(String plainText, String key) {

        StringBuilder cipherText= new StringBuilder();
        plainText = plainText.toUpperCase();
        StringBuilder plainText1 = new StringBuilder();

        for(int i=0;i<plainText.length();i++)
        {
            char ch = plainText.charAt(i);

            if(ch>='A'&&ch<='Z')
            {
                plainText1.append(ch);
            }

            int j = 0;
            for(int i = 0;i<plainText1.length();i++)
            {
                char ch = plainText1.charAt(i);
                cipherText.append((char) ((ch-
'A'+(key.charAt(j++%key.length())-'A'))%26+'A'));

            }
            return cipherText.toString(); }

        @Override
        public String decrypt(String cipherText, String key) {

            String cipherText2 = cipherText;
            StringBuilder plainText = new StringBuilder();
            int j = 0;
            for(int i =0;i<cipherText2.length();i++)
            {
                char ch = cipherText2.charAt(i);
                if(ch>='A'&&ch<='Z')
                    plainText.append((char) ((ch-
key.charAt(j++%key.length())+26)%26+'a'));
            }

            return plainText.toString();

        }
    }
}

```

Key: HELLO

Output:

PLLOFLENSSKSYPCMXSZGLTYPITEETQZXZADLVDEVHXOPTLROFGMVZXHOIZFHLVLTFFVYCPRMVZXA
FLLYRZGFEWJEYYCAIIIAZHMYSCDMWTJLHESFVYRSHOMDAOYXSLRZMXAZFFPPBIPZHBVYEZTALPPO
YXSLBKXSPOPVESOAAPXORIOZKULPCSDDEDPGJEATBNXSCCBKSEVLZPYHPREZHOILTFFHFZGSPXMFF
ZXFAZPOPLTVYYEOPRTNFHAWPRIENVHVMEQCYXSPIWTPCOPVSFFAWLYRHWTEKLVPthVSVRFLEEDW
WWQCCTXSPSKKPMYIDAWYEEZFEOEQZVAYRCVHYPGZOYZKZASPFLQJNZVXSPGDICPHVVYTXBWEWO
FATEVTCWTDZGWZGLXZEVLZWSHROTGPTAPRBRETZALPMZLIOTBNWEZDWIOJCBGLYWTERTBRLZEV
PRRDCJYCTCBWESWZLZWZVATYHOIRCOZWTHWSPDASHOZQWAMYLAPRFESALPDIUWSTBPRRTBASTEB
VXMCWSPTLBAPJMIAXSCCBKSXOYFWPRJPZFRZXSPDLENPHOIYZBJLLWOUGPEVLWPYGLSQDDHGPLB
KFCFGOMYRAFGSPSRXSPFVECTBNJZFBAETCYCMSFCOYXTQWJMLWOPVDZCUMDAWLHXJFLWATFHXXCP
VFMTBNYALBKHZHBPRESSJYCCSUXSTUOEMZJLQJSSHHLYROMRSSYWETZSAPCSTEYJOPVDSWWWMFH
USZYSZLPCZVSVDCBXXQOPVDSWWLYRPRLYMJEDPHOIJNCBPOYCALLGSWMNVSKQPFDALEPCSPALDG
AVLYRLHESSZYDVVRPLZPXEWSEJOCRESSZLLQHHROCSCILWSKXSPHVTXZGAVFYUVJESSSEOOS
YFFEWAALDVVTPWSZWECMPRECYILNVPXTDVVYWOSPXSFPFOEGPPLIYECZWPOIWERLWUFJEVLIDNO
WIZCSSWPSOCIQLZSIYTBHROOWLHTNCBPOZBSCWTSVRESSNVLDGZMAAWUKLYRZMAAWUKLYRMVZXH
PQPECAMXPUSEYNWUKLCCBROXS