```java
class PlayFair {
    @Override
    public String encrypt(String plainText, String key) {

        while(i<n)
        {
            char ch1 = plainText.charAt(i);
            char ch2;

            if(i==n-1)
                ch2='X';
            else
                ch2 = plainText.charAt(i+1);

            if(ch1!=ch2)
            {
                this.substitute(cipherText,ch1,ch2);
                i = i+2;
            }

            else
            {
                ch2 = 'X';
                this.substitute(cipherText,ch1,ch2);
                i++;
            }
        }


        return cipherText.toString();
    }

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

        while(i<n)
        {
            char ch1 = cipherText.charAt(i);
            char ch2;

            if(i==n-1)
                ch2='X';
            else
                ch2 = cipherText.charAt(i+1);

            if(ch1!=ch2)
            {
                this.dsubstitute(plainText,ch1,ch2);
                i = i+2;
            }

            else
            {
                ch2 = 'X';
                this.dsubstitute(plainText,ch1,ch2);
                i++;
            }
        }
        return plainText.toString();
    }
}
}
```

Key: HELLO

Output:

QBLGWCEGELFLKOFNQOLTAKKOSPOUKBTUANKASTQOOUCLCOMFQTCTLNQOLAQUCWHPTEQSLCCTLNN
XEHMFRDQUBQGEMYTFROZMOHKPEAVKHMWHFSEQATBAQOMQUGSUEELGQMNJOXCHOKDHEYTFQUFNQO
LWLHSUEEOPFSELHPSUEHRYLKEPLCEYJOCWCELULRGEJKPFQOTEZPOQELWHTYKPYFQOLHKQHGHYL
ENQGQSTUQMAKMLHNFTPUOKPBQKWEZOLFCEGNRHNQONFSUELZUKAUEKQAQSUQLOPBLLUNQECWCBQ
YFENCULHUTKJTDTENSELLCCALJWTLRJKUEYFQELGDOEYPFLYLFKOXLRMTFXRVECWLENXDEFYELR
XCWORETJOMVPQTUOHZXNQLJXOKJRDOARLYFQOLEAOLEOPBMQMMZKAGSTYMHQOHCOLLCKPDUYFMZ
KABLOFRGOPKNGPKPOKFYBQPFTLGRQKATQLQOMQEADLOAVKTYELCULUQLKVMHDXKAEPFNNQKPLPK
PQULEOQELTQMTBQPKPFKPYFNQOJFYCQMHHMOPSOVFQUQOTEZPLJEUDHLCDEATMXEEQOAKLHKCOQ
ELTFKFEHOHKFLEQOLROKRLFNUMEGLEOPBLCQQTBQPFNXBELWCROQELTEEUKPBGATTYHPTFNFQSE
UQNBNBKHOHPQETLFTMQJKLCNXWCUMKQOUETBJHFJQPFZUOPMLFLYKKPQOCKQSWCTYBQBAHGHYLK
VOLHBLOPBLPBELSTQNDLEXCWLKOPZOKQLQBQMUBJQUTFFTLWHWCWOAENTLQUFNHPQEQLKJQLOPB
MPOTOGERLQOOWFESAFMFYEHWHJKKRLCKLZUOQELWCKVLULQUSOPCLBLQOLRTPQLFTLHHMSYSOCE
OZFLYKQOLREHNYEHMFWCWHHOLCQOORANNLTUSQPFFNQOLOLGCLQEGQQNRYLUEAKAOLXLTUTWKPF
UETLHBENQBQQLATDMHKQOCWEHWHCHOKYFXLRLGSUGPGKPFVQOLWLRGEKAEAWCDXLEHZOCHOOLPK
JOOPMLBMLCBQFESAFLMOXOKHFTQOACUEXLQLQMMZJKPFOPMXKJJKPFEHMFCTLNQNKLYFQNKLDAO
PBKPFEUATMFKLLV