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Practical  $\rightarrow$  Info. Security  
Practical (code) PBC 602

Q3 Q

### Vignere Cipher Encryption & decryption

Ans  $\rightarrow$

```
#include <stdio.h>
#include <string.h>
int main ()
{
    char msg[] = "Cryptography";
    char key[] = "Monarchy";

    int msgLen = strlen(msg), keyLen = strlen(key), i, j;
    char newkey[msgLen], encryptedMsg[msgLen],
    decryptedMsg[msgLen];

    for (i=0, j=0; i < msgLen; ++i, ++j)
    {
        if (j == keyLen)
            j = 0;

        newkey[i] = key[j];

        2 newkey[i] = '\0';
    }
```

ans Singh



// Encryption

for (i = 0; i < msgLen; ++i)

encryptedMsg[i] = ((msg[i] + newKey[i] > %26) + 'A');

encryptedMsg[i] = '\0';

// decryption

for (i = 0; i < msgLen; ++i)

decryptedMsg[i] = (((encryptedMsg[i] - newKey[i] < 0) + 26) % 26) + 'A';

decryptedMsg[i] = '\0';

printf("In original message: %s", msg);  
printf("In key: %s", key);

printf("In New Generated key: %s", newKey);

printf("In encrypted message: %s", encryptedMsg);

printf("In decrypted message: %s", decryptedMsg);  
return 0;

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