

Name - Vaibhav Khochi University roll no. - 1121158

Subject Name - Information Security & Cyber laws (Practical)

Subject Code - PBC - 601

```
Q3 => #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], enc[msglen],
               dec[msglen];

           for (i=0, j=0; i<msglen; i++, j++)
           {
               if (j==keylen)
                   j=0;
               newkey[i] = key[j];
           }
           newkey[i] = '\0';

           for (i=0; i<msglen; i++)
           {
               if (msg[i] >= 'A' && msg[i] <= 'Z')
                   enc[i] = ((msg[i] + newkey[i]) % 26)
                       + 'A';
               else if (msg[i] >= 'a' && msg[i] <= 'z')
                   enc[i] = ((msg[i] + newkey[i]) % 26) + 'a';
           }
```

else {

enc[i] = msg[i]; }

enc[i] = '\0';

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

{

if (msg[i] >= 'A' && msg[i] <= 'Z')

{

dec[i] = ((enc[i] - newkey[i]) + 26) % 26
+ 'A';

}

else if (msg[i] >= 'a' && msg[i] <= 'z')

dec[i] = ((enc[i] - newkey[i]) + 26) % 26
+ 'a';

else {

~~dec[i] = msg[i];~~

}

}

~~dec[i] = '\0';~~

printf("Message: %s", msg);

printf("\n key: %s", key);

printf("\n new key: %s", newkey);

printf("\n Encrypted message: %s", enc);

printf("\n Its Decrypted message: %s", dec);

return 0;

}

Xibhax