



The Islamic University
College of Technical Engineering
Department of Computer Technical Engineering



Fourth Stage

***Security
Lab.***

Lecture 9

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Example

Write a Code in the MATLAB program for Encrypt the message “**Security**” by using **Autokey Algorithm** with **Keyword** is “**hi**”.

Encryption →

$$C_i = (P_i + K_i) \bmod 26$$

Encryption Code

```
clear, clc

p = input('Plaintext = ', 's');
k = input('Key = ', 's');

p = lower(p);
k = lower(k);

Lp = length(p);
Lk = length(k);

if Lp>Lk
    for i=1:Lp-Lk
        p1(i)=p(i);
    end
end
```

```
k1=[k p1];
c = int16(p-97) + int16(k1-97);
c = mod(c,26);
c = char(c+65)
```

The Result of Encryption is

ZMUYTCKG

Homework

By using **Autokey Algorithm**, Encrypt the message **“Security of Computer and Networks”** with **Keyword “24 19 8 17 20 2 4 18”**.