HACETTEPE UNIVERSITY DEPARTMENT OF COMPUTER ENGINEERING BBM 456 HOMEWORK 6



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Subject: Download and Install PGP. Create Encrypted and signed message traffic. Propare 3-4 page report with screenshot

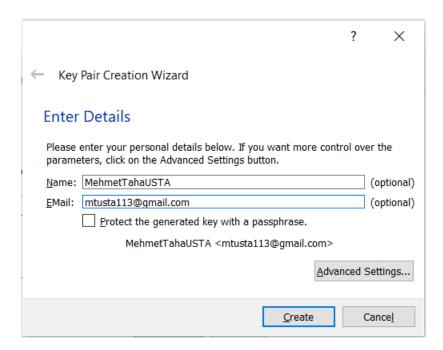
1) Kleopatra program must be installed for Windows



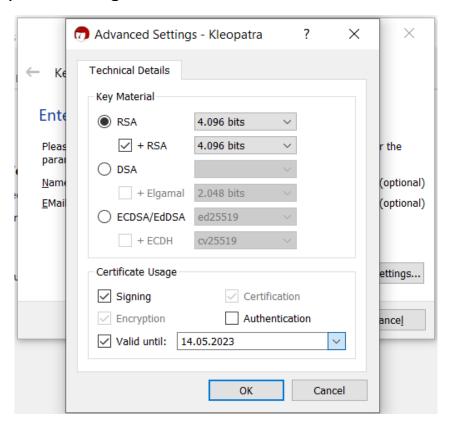
2) Encryption

2.1) New Key Pair

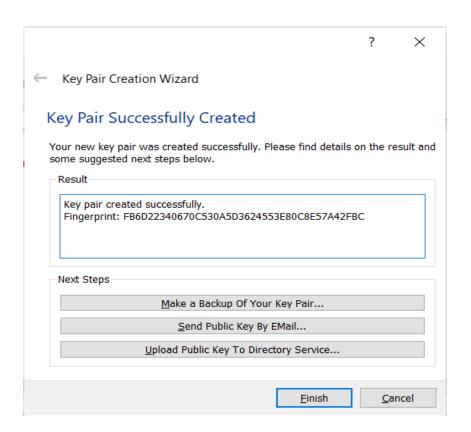
In Encryption, we first need to generate our keys by pressing the New Key Pair button.



2.2) Key Pair Settings



2.3) Generated Keys



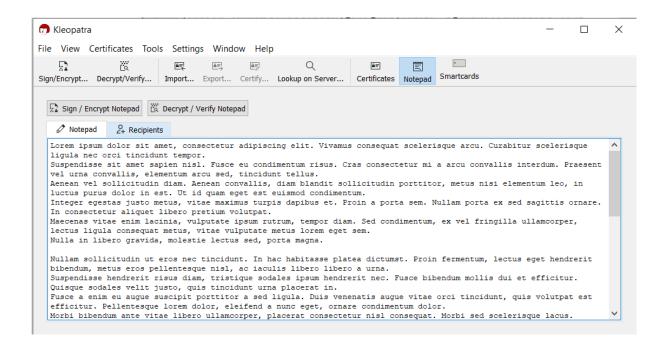
2.4) Exported Public Key

```
----BEGIN PGP PUBLIC KEY BLOCK----
     Comment: User-ID: MehmetTahaUSTA <mtusta113@gmail.com>
    Comment: Created: 12.05.2021 19:26
    Comment: Expires: 14.05.2023 12:00
    Comment: Type: 4.096-bit RSA (secret key available)
     Comment: Usage: Signing, Encryption, Certifying User-IDs
    Comment: Fingerprint: FB6D22340670C530A5D3624553E80C8E57A42FBC
 7
 9
10
    mQINBGCcAboBEAC/fpHxRA3p8pVr5KBShd/PjelIK1Hd7Tc0nigwTXTXit1y3ucQ
11
    fUds+dxPh5AzF2joED3EpeARsweDSL0S4m2ZaYaAD61wW03e/Sturz7dinXYAY6Z
12
     s8TCGmY5bYFMZlgfUyLz2Pe8Y/qv21kP/5WbR4G0DQc7yDTgDebzdX4dsTyozzCl
    VnJhbxjwjbD52mJKYOXOdIn/NP1gmvVTYZX7EWNpEiy75F0gbuFbDI+A01S4qxYN
13
14
    4Z1+tS7dyEGi5ikLPAEBD3Y12AYDiSmLfbDx1/kI9D5xs73n3fBmnkBH42xza2CD
15
    SIiS5iZWY0X2Nzzp3NYydkRSiJuJFucNKnAMRl2/VI5UFjLSL1C4OgNkBlYSiVwS
16
    N300IheDWqCqQmdM6RA3u8Ek8FIR1x1zaMfcH0383rqEM1ZqwVkyP5J9VVivYWnu
    QLvg5EiWj1XNkZc9ENY5mBiwfW7RAUzxi8ISBwVOUTKkPlCofWomRXqwXi4tpidx
17
    WsM9MmPx3ndtS+9QRTY7ZR1HwXq3d+1DZsQ1qSuwa6lj4TYYNTDeIT+1EyhWVzsv
     q6nTFJx+oHXNADG0WFSGUDYzKjQJ09QdfYy8KTMM7+fQuXIhF3STX5L19DzVoTkB
19
20 jVhsloXEydNnuFRWomMmL80VqhF4XbzqjJE/DOLqH0wFQBmEoldFHhfzhwARAQAB
```

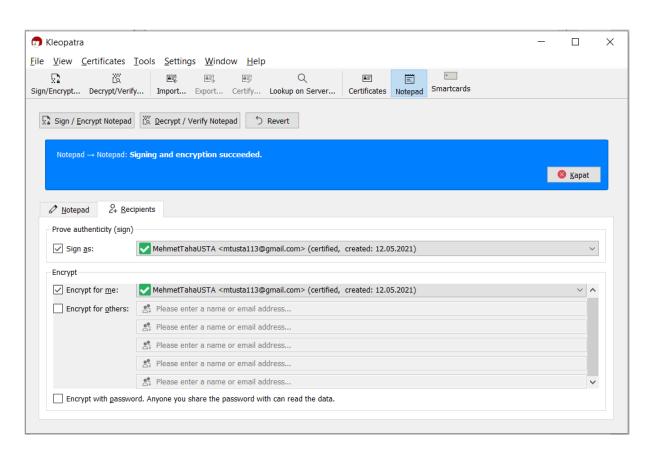
2.5) Exported Private Key

```
----BEGIN PGP PRIVATE KEY BLOCK-----
 3
    1QcYBGCcAboBEAC/fpHxRA3p8pVr5KBShd/PjelIK1Hd7Tc0nigwTXTXit1y3ucQ
    fUds+dxPh5AzF2joED3EpeARsweDSL0S4m2ZaYaAD61wW03e/Sturz7dinXYAY6Z
    s8TCGmY5bYFMZlgfUyLz2Pe8Y/qv21kP/5WbR4G0DQc7yDTgDebzdX4dsTyozzCl
    VnJhbxjwjbD52mJKYOXOdIn/NP1qmvVTYZX7EWNpEiy75F0qbuFbDI+A01S4qxYN
    4Z1+tS7dyEGi5ikLPAEBD3Y12AYDiSmLfbDx1/kI9D5xs73n3fBmnkBH42xza2CD
    SIiS5iZWY0X2Nzzp3NYydkRSiJuJFucNKnAMRl2/VI5UFjLSL1C40gNkBlYSiVwS
    N300IheDWqCqQmdM6RA3u8Ek8FIR1x1zaMfcH0383rqEM1ZqwVkyP5J9VVivYWnu
10
    QLvg5EiWj1XNkZc9ENY5mBiwfW7RAUzxi8ISBwVOUTKkPlCofWomRXqwXi4tpidx
11
    WsM9MmPx3ndtS+9QRTY7ZR1HwXq3d+1DZsQ1qSuwa61j4TYYNTDeIT+1EyhWVzsv
    g6nTFJx+oHXNADG0WFSGUDYzKjQJ09QdfYy8KTMM7+fQuXIhF3STX5L19DzVoTkB
12
13
    jVhsloXEydNnuFRWomMmL80VqhF4XbzgjJE/DOLqH0wFQBmEoldFHhfzhwARAQAB
14
   AA/9G0lTTXA3lVb6QLIGwEuQPTiI/b4if7+OBsLkkiFvXUlNzdECVuCrHVWrNW/p
15
   NcaHrc2mp49FUvBSSTxDqN235UzanAPf4Gs6OOSVXEO/bv0MVre+FJu/lTMCzvsS
16
   GqtZUjlb+Sq5ANCOR3u3qKaYMFSroDbdCYE5O5Xvi1B6JIv9SOaetWiQit6OTI68
   IZYjPFr7VARaJ5Hq6umZvIRixTBQnIe49RsQxXugRAORrTcv0tKaJWc5NHVn1LV0
17
    2Nv4DEBEG10UKI78KGPSlixWWte+Bi8beMM2c8Q1vcGeAkBfU0EBMyPSRjBiVRv3
```

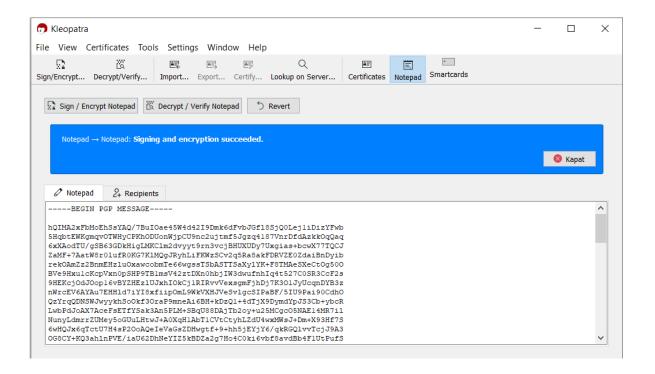
2.6) Message to be encypted



2.7) The message is encrypted with the selected Public Key



2.8) Encrypted Message



2.9) The decrypted message is obtained by pressing the "Decrypt/Verify Notepad" button. The text obtained is the same as the original message.

