## **EDUNET FOUNDATION-Class Exercise**

## **Lab1: Demonstrating Public Key Cryptography**

Step 1: First visit the following link: http://www.narbona.net/uah/Crypto.html

| Public-Key encryption Demo   |
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| Step 1: Generate Keys  |
| Press the button to generate a pair of randomly chosen keys.   |
| The public key will be posted in a public key repository where anyone can find it.   |
| The private key should be known only to you.   |
| Generate keys Public key: Private key:   |
| Step 2: Encrypt the message  |
| Now type in a short message and enter one of the keys from above. Then press the button.   |
| Message: Encryption key: Encode message  |
| The encrypted message:   |
| Step 3: Decrypt the message  |
| Pretend that you have received the encrypted message over the Internet. Now enter an appropriate decryption key and press the "Decode" button. |
| Hint: If you used one of the two keys generated in step 1, the other key works here.   |
| Decryption key: Decode message   |
| The decrypted message:   |
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Step 2: Next step generate keys. To generate keys, click on generate keys button.

| Step 1: Generate Keys  |
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| Press the button to generate a pair of randomly chosen keys.                         |
| • The public key will be posted in a public key repository where anyone can find it. |
| The private key should be known only to you.   |
| Generate keys Public key: Private key:   |
|  |
| Step 1: Generate Keys  |
| Press the button to generate a pair of randomly chosen keys.                         |
| The public key will be posted in a public key repository where anyone can find it.   |
| The private key should be known only to you.   |
| Generate keys Public key: 47 Private key: 209  |

**Step 3:** Next, Type short message and enter public encryption key. Then click on encode message button to encrypt the message.

| Step 2: Encrypt the message   |
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| Now type in a short message and enter one of the keys from above. Then press the button.        |
| Message: Welcome students in today session Encryption key: 47 Encode message                    |
| The encrypted message: 134148155146158156148791621631641471481571631627915215779163158147144168 |

**Step 4:** Now enter decryption key and click on decode message button to decrypt the message.

| Step 3: Decrypt the message  |
|--|
| Pretend that you have received the encrypted message over the Internet. Now enter an appropriate decryption key and press the "Decode" button. |
| Hint: If you used one of the two keys generated in step 1, the other key works here.   |
| Decryption key: 209 Decode message   |
| The decrypted message: Welcome students in today session   |