

# **BABU BANARASI DAS UNIVERSITY**



## **SCHOOL OF COMPUTER APPLICATION**

Department of Computer Application

**BCACSN11**

Session 2025-26

## **PRACTICAL LAB FILE**

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**SUBMITTED TO:-**

Mr Anand Kumar

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			<b>Remark</b>
1.	RSA encryption decryption using public and private key.		

# Practical

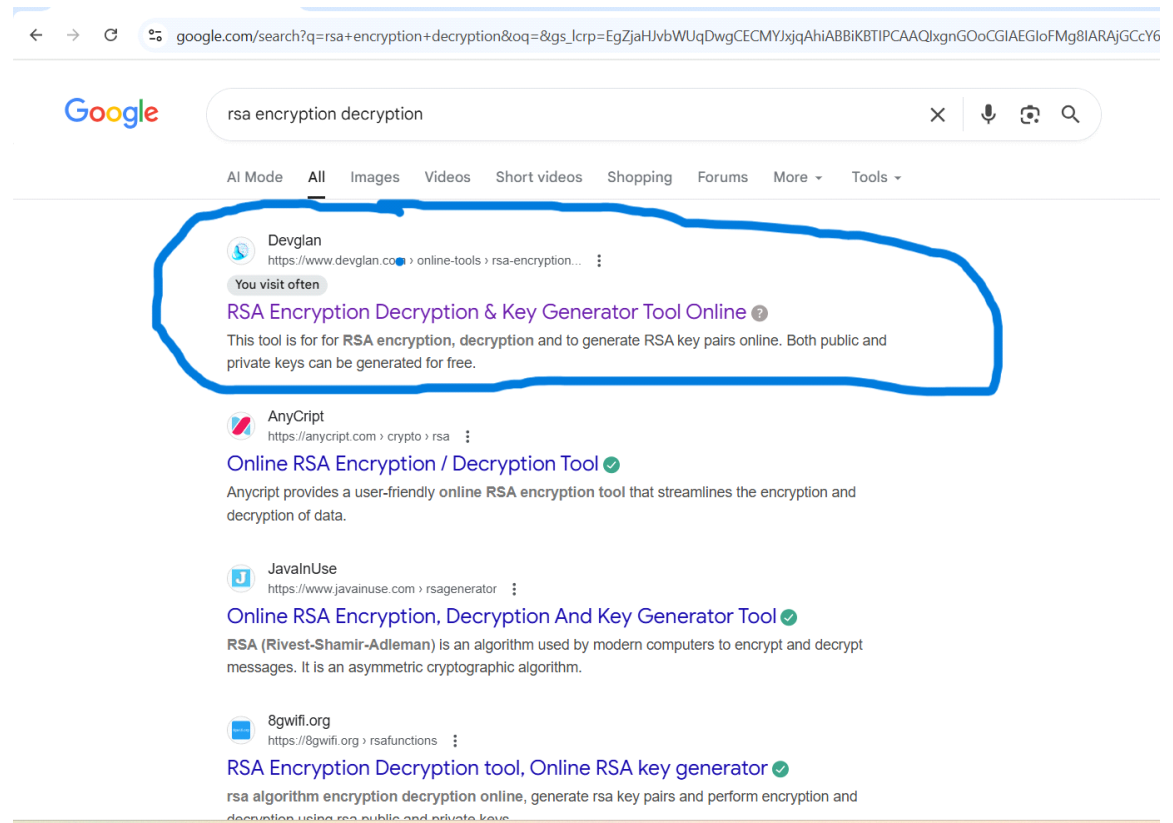
## RSA Incryption decryption

**Definition :** Rsa is a public-key cryptographic algorithm used to secure data transmission. It uses two keys- a public key for encryption and a private key for decryption.

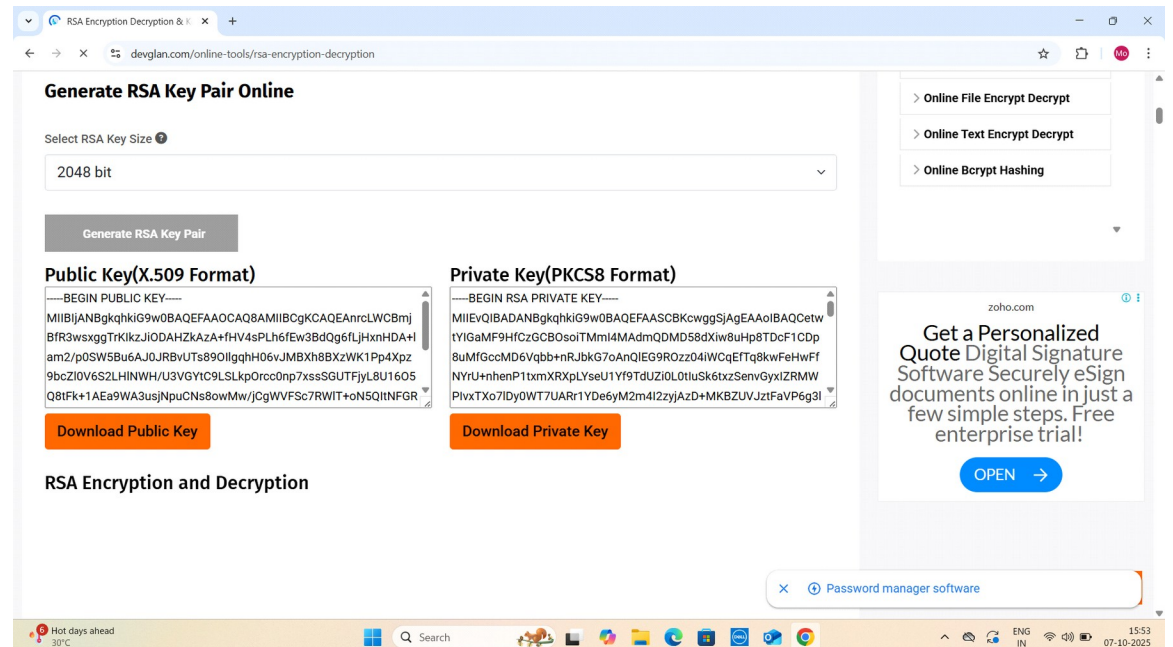
### tools:

- \* Google chrome
- \* Incryption & decryption website

Step 1: Open google and search RSA Encryption and decryption.



Step 2: Click first link.



Step 3: Generate RSA key pair.

Step 4: Enter plain text to Encrypt in RSA Encryption.

### RSA Encryption

Enter Plain Text to Encrypt ?

Mohd Naim

Enter Public/Private key ?

-----BEGIN PUBLIC KEY-----  
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEASLex5GyXu  
g4zH13wn3iLj3iQTFv3uwGzNccf5KGPBF6ddq/o3DguTyBPrCUZsC7y  
YYKYVoWV9op0Wb2vgIWjCtZ0GzM4UJrnX0Hu/6aSNwMYXrsaCti+g5P  
7IA9TSGX/Fg08erd5MmDrVamq9ESjUo4AxKLICdnKSbsHaaq4zQpoS  
prekaxDhb8AXCQXbpHCrWTFf7IXjK0nLtJN5jXizm6yLai0pL3CHICZfL

RSA Key Type: ☒ Public key ☐ Private Key

Select Encryption Algorithm ?

RSA/ECB/PKCS1Padding

Encrypt

### RSA Decryption

Enter Encrypted Text to Decrypt (Base64) ?

Enter Encrypted Text to Decrypt

Enter Public/Private key ?

-----BEGIN RSA PRIVATE KEY-----  
MIIEvQIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQDJlt  
7HkbJe6DjMfXfCfeluPeKpMW/e7AbM1xx/koY8Exp12r+jcOC5PIE+sJ  
RmwLvJhgpihZX2inRZva+CVaMK3PQbMzhQmufHQe7/ppI3Axheuxo  
K0j6Dk/sgD1NIZf8WDTx6t3kyYotVqar0RKNSjgDEouUJ2cpJuwdpqrj  
NCmhKmt6RrEOFvwBcJdBuKcKtZN9/uVeMrScgu0k3mNeL0brltqLSk

RSA Key Type: ☐ Public key ☒ Private Key

Select Decryption Algorithm ?

RSA/ECB/PKCS1Padding

Decrypt

Step 5: The data has been encrypted .

Step 6: The encrypted data was copied and pasted into RSA decryption.

The screenshot shows the 'RSA Encryption Decryption & ' browser window. The 'RSA Encryption' section on the left has 'Mohd Naim' entered in the 'Enter Plain Text to Encrypt' field. The 'Enter Public/Private key' field contains a public key. The 'RSA Key Type' is set to 'Public key' and the 'Select Encryption Algorithm' is 'RSA/ECB/PKCS1Padding'. The 'Encrypt' button is visible. The 'Encrypted Output (Base64):' field shows a long string of encrypted data. The 'RSA Decryption' section on the right is empty, with the 'Enter Encrypted Text to Decrypt' field blank. The 'Decrypt' button is visible. A Zoho.com advertisement is on the right side of the page. The browser's address bar shows 'devglan.com/online-tools/rsa-encryption-decryption'. The Windows taskbar at the bottom shows the time as 15:55 on 07-10-2025.

Step 7: Then decrypt.

Enter Plain Text to Encrypt ?

Mohd Naim

Enter Public/Private key ?

9bcZI0V6S2LHINWH/U3VGYtC9LSLkpOrcc0np7xssSGUTFjyL8U16O5  
Q8tFk+1AEa9WA3usjNpuCNs8owMw/jCgWVFSc7RWIT+oN5QItNFG  
RavF+RnSRfr4uaTljO8pv0+HP1n2X/JWVTdScwP40p3tE/9ERl8QOtU  
gyNpzAdcshVmsqls9+rCcbYgNECwuo2tTjFxoEY3uU5ls8BXb5C+cRi1  
ssbnokwIDAQAB  
-----END PUBLIC KEY-----

RSA Key Type: ☒ Public key ☐ Private Key

Select Encryption Algorithm ?

RSA/ECB/PKCS1Padding

Encrypt

Encrypted Output (Base64):

HaFdS15sBC04y/Gzr8EqKFgs6zt70EorVKsBSgM7zY0YCEoNjJ3gRTh  
9nNb8IKxx3LW/1w0P6w3DdgL0/5SExwmhX7EVxeH4IP2qITmITmIQ  
wT4xYyzNbgwp5ANjbZ9NsS8X1xVu3/4N1ZoSlKWn2AGnzcCRFCUjf  
LDIdljTgpP3Zw69WbjHZLXlfscssPR5GWh0pT505RglCQquKo97C4+Z  
SyrildyNUmkMZpwxLVB7IDI+ul6gRQwSHVtsgg1GhAdYPbYienvlcLLM

Enter Encrypted Text to Decrypt (Base64) ?

LDIdljTgpP3Zw69WbjHZLXlfscssPR5GWh0pT505RglCQquKo97C4+Z  
SyrildyNUmkMZpwxLVB7IDI+ul6gRQwSHVtsgg1GhAdYPbYienvlcLLM  
yUUZdHA0wbrDf5yiaUAQ43VAYvCpFAgh1uhFIDWKLNNmxNMRQh3i9  
JM9/dqPeISdm+IXQ==

Enter Public/Private key ?

-----BEGIN RSA PRIVATE KEY-----  
MIIEvQIBADANBgkqhkiG9w0BAQEFAASCBCwggSjAgEAAoIBAQCetw  
tYIGaMF9HfCzGCB0soiTMml4MAdmQDMD58dXiw8uHp8TDcF1CDp  
8uMfGccMD6Vqbb+nRjBkG7oAnQIEG9ROzz04iWCqEftQ8kwFeHwFf  
NYrU+nhenP1txmXRXpLYseU1Yf9TdUzi0L0tluSk6txzSenvGyxIZRMW  
PlvxTXo7IDy0WT7UARr1YDe6yM2m4I2zyjAzD+MKBZUVJztFaVP6g3I

RSA Key Type: ☐ Public key ☒ Private Key

Select Decryption Algorithm ?

RSA/ECB/PKCS1Padding

Decrypt

Decrypted Output:

Mohd Naim