

BABU BANARASI DAS UNIVERSITY



SCHOOL OF COMPUTER APPLICATION

Department of Computer Application

BCACSN11

Session 2025-26

PRACTICAL LAB FILE

SUBMITTED BY :-

NAME – Asmit Kumar

SECTION – BCACSN11

ROLL NO - 1250264029

SUBMITTED TO:-

Mr Anand Kumar

INDEX

S.No.	Name of Experiments	Page No.	Sign/
--------------	----------------------------	-----------------	--------------

			Remark
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.

rsa encryption decryption

All Mode All Images Videos Short videos Shopping Forums More Tools

Devglan
https://www.devglan.com/online-tools/rsa-encryption-decryption...
You visit often

RSA Encryption Decryption & Key Generator Tool Online ?

This tool is for RSA encryption, decryption and to generate RSA key pairs online. Both public and private keys can be generated for free.

AnyCrypt
https://anycript.com/crypto/rsa...
Online RSA Encryption / Decryption Tool ✓

Anycrypt provides a user-friendly online RSA encryption tool that streamlines the encryption and decryption of data.

JavaInUse
https://www.java-inuse.com/rsagenerator...
Online RSA Encryption, Decryption And Key Generator Tool ✓

RSA (Rivest-Shamir-Adleman) is an algorithm used by modern computers to encrypt and decrypt messages. It is an asymmetric cryptographic algorithm.

8gwifi.org
https://8gwifi.org/rsafunctions...
RSA Encryption Decryption tool, Online RSA key generator ✓

rsa algorithm encryption decryption online, generate rsa key pairs and perform encryption and decryption using rsa public and private keys.

Step 2: Click first link.

2048 bit

Generate RSA Key Pair

Public Key(X.509 Format)

```
-----BEGIN PUBLIC KEY-----MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIICgKCAQEAsrL98Yx5v/a9GHcvI2J9zdfGcTKPk00yM6zYlm3C9oHrMz/i9ZHBShrsV5DThs3CGf01aqk1fqtwEl4p6N+wL2hna+3brzMizYneJRQK1vvukn+mByAIN2O92Xb18bQb7M+b0ciG+IXSI/vYIlaDnev1mFf5MeYpjQgRMD/NRPQiiQfidZOcfW4PUH63flxC9zP93AjLu0j213xNPf71Ame/w7LCrgj8CvTVFG
```

Download Public Key

Private Key(PKCS8 Format)

```
-----BEGIN RSA PRIVATE KEY-----MIIEvgIBADANBgkqhkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQcysv3xjHm/9r0YcK/yXYn3N18ZxMo+TTTlzrNiWbcL2geszP+L1kcFKGuxXkNOGzclZ/TVqqTV+q3AQjino37Avagdr7duusyLNid4lFArW++6Sf6YHIAg3Y73ZdvXxtBvsz5vRylb6Jdlj+9gshoOd6/WYV/kx5im+OVCEwp81E9cIhb+B1k5x9bg9Qfrd8jEL3M/3ccCMu7SPbXfE08XvUCZ7/DssKu
```

Download Private Key

Discover more Encryption OpenSSL consulting services
Cryptographic Secure email providers
Data encryption software Blockchain technology courses
Encryption algorithm selection SSL TLS certificates
Asymmetric encryption guide Penetration testing services

Step 3: Generate RSA key pair.

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

Discover more

- [Secure key generation](#)
- [cryptography](#)
- [Password managers](#)
- [Blockchain technology courses](#)
- [VPN services](#)
- [Cryptography](#)
- [Data encryption service](#)
- [Optimal key length](#)
- [cryptographic](#)
- [Generate public key](#)

RSA Encryption

Enter Plain Text to Encrypt [?](#)

Enter Public/Private key [?](#)

```
2Xb18bQb7M+b0ciG+iXSi/VYLiIaDnev1mFf5MeYpjIqgRMD/NRPQiiQ
fidZocfw4PUH63fixC9zP93AjLu0j213xNPF71Ame/w7LCrgl8CvTVFG
ZYuBrKzlHrmEuQBczTkxBzMsT7BqJhRqxDm75VMKP73nNNI639x
M9H9SBW428G59QnEv9ANnaYuiMMGcy2kuTAYQRYq3OQlQcQBrqy
wJ0hKwlDAQAB
----END PUBLIC KEY----
```

RSA Decryption

Enter Encrypted Text to Decrypt (Base64) [?](#)

Enter Encrypted Text to Decrypt

Enter Public/Private key [?](#)

```
----BEGIN RSA PRIVATE KEY----
MIIEvgIBADANBgkqhkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQCs
v3xjHm/9r0YcK/yXYn3N18ZxMo+TTIzrNiWbcL2geszP+L1kcFKGUx
XkNOGzclZ/TVqqTV+q3AQjino37AvaGdr7duusyLNid4IFarW++6Sf6Y
HIAg3Y73ZdvXxtBvsz5vRylb6Jdij+9gshoOd6/WYV/kx5im+OVCBewP
81E9ClhB+J1k5x9bg9Qfrd8jEL3M/3cCMu7SPbXfE08XvUCZ7/DssKu
```

RSA Key Type: [?](#) Public key Private Key

Select Decryption Algorithm [?](#)

RSA/ECB/PKCS1Padding

Step 5: The data has been encrypted .

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

RSA Encryption

Enter Plain Text to Encrypt [?](#)

Enter Public/Private key [?](#)

```
TgT79p/Dok0Tq6CiZgT/GJtlgoUmSYt24o5/GOVbOrhqBOUM/ZknPGt
m0czY/XGFfc6ssZTEl0Fl4N1HpvddxRrpQIKl3yud4fxFj8D3k5SWV6Pg
5cEjMw7HkymJ8WOWrzlyT/yg6oAs5P/Our/2hz8V01oUotfc6Tzmp+
AzEEmkTcl75RFfp19grucPA3ehJ4GwWoznQ22jRYi6PrKErnKqle2+NR
ap2wbVh0AQuiEm51H2Wu1JGYgiD48Qef0K21UlaCMIJUGjAos63M1
5LY24jwIDAQAB
```

RSA Key Type: [?](#) Public key Private Key

Select Encryption Algorithm [?](#)

RSA/ECB/PKCS1Padding

Encrypt

Encrypted Output (Base64):

Result goes here

Enter Public/Private key [?](#)

----BEGIN RSA PRIVATE KEY----

```
MIIEvgIBADANBgkqhkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQClgZ
nxvFONHz99ab6jGsWhYc6Mc3cTeSQxQrNsBMBbm5fkCakXj3Jactz
AB6xOBPv2n8OiTROroKJmBP8Vm2WChSZJi3bjn8Y5Vs6uGoE5Qz9
mSc8a2Y5zNj9cYY9zqyxIMSXQUjg3Uem913FGulAgqXfK53h/EWPwP
eTIUZXo+DlwSMzDseTKYnxY5avMJP/KDqgCzk//S6v/aHPxU7WhQ6
```

RSA Key Type: [?](#) Public key Private Key

Select Decryption Algorithm [?](#)

RSA/ECB/PKCS1Padding

Decrypt

Decrypted Output:

Result goes here

Step 7: Then decrypt.

Enter Public/Private key ?

```
2Xb18bQb7M+b0ciG+ixSI/vYLlaDnev1mFf5MeYpvjlQgRMD/NRPQilQ
fidZOfW4PUH63flxC9zP93AjLu0j213xNPF71Ame/w7LCrgl8CvTVFG
ZYuBrKzlHrmEuQBczTKgxBZmTS7BqJhRqxDm75VMKP73nNNI639x
M9H9SBW428G59QnEv9ANnaYuiMMGcy2kuTAYQRYq30QlQcQBrqy
wJ0hKwIDAQAB
----END PUBLIC KEY----
```

RSA Key Type: Public key Private Key

Select Encryption Algorithm ?

RSA/ECB/PKCS1Padding

Decrypt

Decrypted Output:

```
ASHMITH
```

Encrypted Output (Base64):

```
NQ/WHQp/JkWgNHM0mBktQzzMuBCKGA2b3hBwTzRkP/xsuu/iyeny
+mljOONuUKwtbWXmyLXY+yopbqQXCFKiKwl4U2ppi6MHCDVqJAKT1
a1ZaoeGvmKDNzeocFYQZPIBexKR6MhhgJveeJBsv8KrsOJ38l5/nAys
CPyRr2NHpMBlo5KeutMxAgaXSilGdnisSp4DeqVPx79oMP8QQkG+Bk
QUczPQg9YwGln5EtBSwQ==
```