

## AES Encryption

Enter Plain Text to Encrypt -

Кожен день є новим початком. Подолайте свої страхи, вірте в себе і рухайтесь вперед. Ваш успіх чекає вас.

The String which is to be encrypted using AES

Select Mode

ECB ▾

AES works in 2 modes - CBC and ECB mode.

**CBC (Cipher Block Chaining)** requires Initialization Vector(IV) to make each message unique. Using IV we randomize the encryption of similar blocks. So any identical plain text blocks will be encrypted into dissimilar cipher text blocks

**ECB(Electronic Code Book)** encryption mode does not need the IV for encryption. The input plain text will be divided into blocks and each block will be encrypted with the key provided and hence identical plain text blocks are encrypted into identical cipher text blocks.

Key Size in Bits

128 ▾

The input can be of 128 bit or 192 bit or 256 bit

So if key size is 128 then "aesEncryptionKey" is a valid secret key because it has 16

Enter Initialization Vector -

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Key Size in Bits

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The input can be of 128 bit or 192 bit or 256 bit

So if key size is 128 then "aesEncryptionKey" is a valid secret key because it has 16 characters i.e.  $16 \times 8 = 128$  bits

Enter Initialization Vector -

The initialization vector is needed in case of CBC mode

The initialization vector size should be 128 bit

So if initialization vector size is 128 then "encryptionIntVec" is a valid initialization vector because it has 16 characters i.e.  $16 \times 8 = 128$  bits

Enter Secret Key -

aesEncryptionKey

As AES is a symmetric algorithm the same secret key can be used for both encryption and decryption. The expected secret key have specified in the key size dropdown

So if key size is 128 then "aesEncryptionKey" is a valid secret key because it has 16 characters i.e.  $16 \times 8 = 128$  bits

Output Text Format

Base64 ▾

Specify if output format should be in Base64 encoded format or Hex Encoded format.

Encrypt

kn7h0zpJ5KYobaxBUPMvcdYDtt+NICrFBH8qFupdpBxSL7efZ36jNpJGwIQfsBxBu8GRfmsYtwrGxht1+iozDCqFKNIaqs1YHIKynj5BCMvvcJ3qf1TgdaTramQeDrzUyUQKZpLk2QrPTDQxQ5a4KzCr+b+H1o4a5Ap1R9;

Enter Encrypted Text to Decrypt -

KlurKxjDjOKTub6ACDyYwGUTU8YKcI7bM4FupqjDOLrErLz3pHgJowRuf3oK2u8QpKtWbTt  
wwrGxhtI+HozDCqFXNlaq51YrHKYngSBCMvVCJ3qF1TgdTtramQeDztJyUJKZpLk2QqPTDQX  
Q5a4KzCrb+M1o4aSArIR9It7SzeHhBNQsGv7r9EMBxw2GqYVWwLBgPvVWU4QDWSaQ9Pnc  
0Ug+Jigt3vLQwENiYcT21VtHhOpJyUcB6H6t9SyatJ

Input Text Format

Base64

Select Mode

ECB

Key Size in Bits

128

Enter Initialization Vector -

Enter Secret Key -

aesEncryptionKey

Decrypt

The AES Encrypted String which we want to decrypt

Specify if input format is in Base64 encoded format or Hex Encoded format.

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ECB(Electronic Code Book) encryption mode does not need the IV for encryption. The input plain text will be divided into blocks and each block will be encrypted with the key provided and hence identical plain text blocks are encrypted into identical cipher text blocks.

The input can be of 128 bit or 192 bit or 256 bit

So if key size is 128 then "aesEncryptionKey" is a valid secret key because it has 16 characters i.e  $16 \times 8 = 128$  bits

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The initialization vector size should be 128 bit

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As AES is a symmetric algorithm the same secret key can be used for both encryption and decryption. The expected secret key size we have specified in the key size dropdown

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