

H-MAC FUNCTION:

1. HMAC-

Function to create MAC from fixed length hash

Parameters	Datatype	Description
msg	str	Plaintext
key	str	Random chosen key for authentication
iv	str	Random chosen noise
g	int	A primitive root of p
h	int	Another primitive root of p
p	int	Prime number p to use in DLP
fixed_length	int	Length of fixed hash output

Return:

(str): h-mac code of given plaintext

Called by:

Main code

Caller of:

- fixedLengthHash
- decimalToBinary
- binaryToDecimal