

# Module `crypto-lib.hmac.hmac`

## Classes

```
class H_MAC (type=1)
```

Class for making a hash based MAC for generating a tag in CCA-secure encryption schemes. These are faster than the CBC MAC.

Initialize the type of the one way function.

## Methods

```
def key_gen(self, n)
```

Generate an n-bit key for performing MAC using PRG.

```
def mac(self, message, key)
```

Generate a tag for a given message and a key. The tag is a fixed length value generated by taking the hash in two steps using the previously defined MerkleDamgard function.

```
def verify(self, message, key, tag)
```

Verify if the message and the tag generated match up.