# **HMAC** Documentation

## binstring(self, g, p):

Input variables: x(int)

- Takes a number x and outputs it's corresponding binary representation in the form of a
- string
- It's a helper function

## genKey(self,n):

Input variables: n(int)

Generates a random binary string of length n

### getint(self,s):

Input variables: s(str)

Returns the integer value of a string containing the binary representation

#### setStrLen(self, s, n):

Input variables: s(str), n(int)

Sets a binary string to given length n and returns it

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getxor(self, s1, s2):
```

Input variables: s1(str), s2(str)

Performs xor between to binary strings and returns the outcome in binary string format

```
hmac(self, hash, m, k):
```

Input variables: hash(hash obj), m(str), k(str)

- Implements hmac using the hash object
- Returns the hmac of m(=t)