

# Contents

<b>1</b>	<b>Module Sha1 : SHA1 OCaml binding</b>	<b>1</b>
<b>2</b>	<b>Module Sha256 : SHA256 OCaml binding</b>	<b>1</b>
<b>3</b>	<b>Module Sha512 : SHA512 OCaml binding</b>	<b>2</b>

## 1 Module Sha1 : SHA1 OCaml binding

type t

digest type - opaque

val string : string -> t

Return the digest of the given string.

val substring : string -> int -> int -> t

Sha1.substring s ofs len returns the digest of the substring of s starting at character number ofs and containing len characters.

val channel : Pervasives.in\_channel -> int -> t

If len is nonnegative, Sha1.channel ic len reads len characters from channel ic and returns their digest, or raises End\_of\_file if end-of-file is reached before len characters are read. If len is negative, Sha1.channel ic len reads all characters from ic until end-of-file is reached and return their digest.

val file : string -> t

Return the digest of the file whose name is given.

val file\_fast : string -> t

Return the digest of the file whose name is given using fast C function

val output : Pervasives.out\_channel -> t -> unit

Write a digest on the given output channel.

val input : Pervasives.in\_channel -> t

Read a digest from the given input channel.

val to\_hex : t -> string

return a printable hexadecimal representation of the given digest

## 2 Module Sha256 : SHA256 OCaml binding

```
type t
  digest type - opaque

val string : string -> t
  Return the digest of the given string.

val substring : string -> int -> int -> t
  Sha256.substring s ofs len returns the digest of the substring of s starting at character
  number ofs and containing len characters.

val channel : Pervasives.in_channel -> int -> t
  If len is nonnegative, Sha256.channel ic len reads len characters from channel ic and returns
  their digest, or raises End_of_file if end-of-file is reached before len characters are read. If
  len is negative, Sha256.channel ic len reads all characters from ic until end-of-file is reached
  and return their digest.

val file : string -> t
  Return the digest of the file whose name is given.

val file_fast : string -> t
  Return the digest of the file whose name is given using fast C function

val output : Pervasives.out_channel -> t -> unit
  Write a digest on the given output channel.

val input : Pervasives.in_channel -> t
  Read a digest from the given input channel.

val to_hex : t -> string
  return a printable hexadecimal representation of the given digest
```

## 3 Module Sha512 : SHA512 OCaml binding

```
type t
  digest type - opaque

val string : string -> t
  Return the digest of the given string.

val substring : string -> int -> int -> t
```

Sha512.substring s ofs len returns the digest of the substring of s starting at character number ofs and containing len characters.

`val channel : Pervasives.in_channel -> int -> t`

If len is nonnegative, Sha512.channel ic len reads len characters from channel ic and returns their digest, or raises End\_of\_file if end-of-file is reached before len characters are read. If len is negative, Sha512.channel ic len reads all characters from ic until end-of-file is reached and return their digest.

`val file : string -> t`

Return the digest of the file whose name is given.

`val file_fast : string -> t`

Return the digest of the file whose name is given using fast C function

`val output : Pervasives.out_channel -> t -> unit`

Write a digest on the given output channel.

`val input : Pervasives.in_channel -> t`

Read a digest from the given input channel.

`val to_hex : t -> string`

return a printable hexadecimal representation of the given digest