Quadratic Sieve

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Contents

Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

Chapter 4

Namespace Documentation

4.1 QS Namespace Reference

Namespaces

- numeric

Classes

- class Factor_base
- class Abstract_factor_base

Enumerations

- enum legendre_value { IS_NOT_QUADRATIC_RESIDUE }

4.1.1 Enumeration Type Documentation

4.1.1.1 enum QS::legendre_value

Enumerator

IS_NOT_QUADRATIC_RESIDUE

4.2 QS::numeric Namespace Reference

Classes

- class Vector
- class Abstract_vector

Chapter 5

Class Documentation

5.1 QS::Abstract_factor_base Class Reference

`#include <abstract_factor_base.h>`

Public Member Functions

- Factor_base ()=delete
- Factor_base (mpz N)
- Factor_base (mpz_N, long unsigned upper_bound)
- unsigned long operator[] (unsigned int i) const

5.1.1 Member Function Documentation

5.1.1.1 QS::Abstract_factor_base::Factor_base ( ) [delete]

5.1.1.2 QS::Abstract_factor_base::Factor_base (mpz *N*) [explicit]

5.1.1.3 QS::Abstract_factor_base::Factor_base (mpz_N , long unsigned *upper_bound*)

5.1.1.4 unsigned long QS::Abstract_factor_base::operator[] (unsigned int *i*) const

The documentation for this class was generated from the following file:

- include/virtual/abstract_factor_base.h

5.2 QS::numeric::Abstract_vector< T > Class Template Reference

`#include <abstract_vector.h>`

Public Member Functions

- Vector ()
- Vector (std::size_t t)
- Vector (std::size_t t, T initial_value)
- T operator[] () const
- T & operator[] ()

5.2.1 Member Function Documentation

5.2.1.1 template<typename T > T QS::numeric::Abstract_vector< T >::operator[] ( ) const

5.2.1.2 template<typename T > T& QS::numeric::Abstract_vector< T >::operator[] ( )

5.2.1.3 template<typename T > QS::numeric::Abstract_vector< T >::Vector ( )

5.2.1.4 template<typename T > QS::numeric::Abstract_vector< T >::Vector (std::size_t *t*)

5.2.1.5 template<typename T > QS::numeric::Abstract_vector< T >::Vector (std::size_t *t*, T *initial_value*)

The documentation for this class was generated from the following file:

- include/virtual/abstract_vector.h

5.3 QS::Factor_base Class Reference

`#include <factor_base.h>`

Public Member Functions

- Factor_base ()=delete
- Factor_base (mpz N)
- Factor_base (mpz_N, long unsigned upper_bound)
- unsigned long operator[] (unsigned int i) const

5.3.1 Constructor & Destructor Documentation

5.3.1.1 QS::Factor_base::Factor_base ( ) [delete]

5.3.1.2 QS::Factor_base::Factor_base (mpz *N*) [explicit]

5.3.1.3 QS::Factor_base::Factor_base (mpz_N , long unsigned *upper_bound*)

5.3.2 Member Function Documentation

5.3.2.1 unsigned long QS::Factor_base::operator[] (unsigned int *i*) const

The documentation for this class was generated from the following file:

- include/factor_base.h

5.4 QS::numeric::Vector< T > Class Template Reference

`#include <vector.h>`

Public Member Functions

- Vector ()
- Vector (std::size_t t)

- Vector (std::size_t t, T initial_value)
- T operator[] () const
- T & operator[] ()

5.4.1 Constructor & Destructor Documentation

5.4.1.1 template<typename T > QS::numeric::Vector< T >::Vector ( )

5.4.1.2 template<typename T > QS::numeric::Vector< T >::Vector (std::size_t *t*)

5.4.1.3 template<typename T > QS::numeric::Vector< T >::Vector (std::size_t *t*, T *initial_value*)

5.4.2 Member Function Documentation

5.4.2.1 template<typename T > T QS::numeric::Vector< T >::operator[] ( ) const

5.4.2.2 template<typename T > T& QS::numeric::Vector< T >::operator[] ( )

The documentation for this class was generated from the following file:

- include/vector.h

Chapter 6

File Documentation

6.1 include/factor_base.h File Reference

```
#include <gmp>
#include "vector.h"
```

Classes

- class QS::Factor_base

Namespaces

- QS

Enumerations

- enum QS::legendre_value { QS::IS_NOT_QUADRATIC_RESIDUE }

6.2 include/vector.h File Reference

```
#include "../virtual/Vector"
#include <iostream>
```

Classes

- class QS::numeric::Vector< T >

Namespaces

- QS
- QS::numeric

Macros

- #define VECTOR_GUARD

6.2.1 Macro Definition Documentation

6.2.1.1 #define VECTOR_GUARD

6.3 include/virtual/abstract_factor_base.h File Reference

```
#include <gmp>
#include "vector.h"
```

Classes

- class QS::Abstract_factor_base

Namespaces

- QS

6.4 include/virtual/abstract_vector.h File Reference

Classes

- class QS::numeric::Abstract_vector< T >

Namespaces

- QS
- QS::numeric

Macros

- #define ABSTRACT_VECTOR_GUARD

6.4.1 Macro Definition Documentation

6.4.1.1 #define ABSTRACT_VECTOR_GUARD

6.5 src/main.cpp File Reference

```
#include <iostream>
#include <gmp>
```

Functions

- int main ()

6.5.1 Function Documentation

6.5.1.1 int main ( )

Index