My Project

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1 Class Index 1

1.1 Class List . . . 1

2 File Index 3

2.1 File List . . . 3

3 Class Documentation 5

3.1 congrRand Class Reference . . . 5

3.1.1 Detailed Description . . . 5

3.1.2 Constructor & Destructor Documentation . . . 5

3.1.2.1 congrRand() . . . 6

3.1.3 Member Function Documentation . . . 6

3.1.3.1 rand() . . . 6

3.1.3.2 srand() . . . 6

3.2 viborki Class Reference . . . 6

3.2.1 Detailed Description . . . 7

3.2.2 Constructor & Destructor Documentation . . . 7

3.2.2.1 viborki() [1/3] . . . 7

3.2.2.2 viborki() [2/3] . . . 7

3.2.2.3 viborki() [3/3] . . . 8

3.2.3 Member Function Documentation . . . 8

3.2.3.1 coefficientOfVariation() . . . 8

3.2.3.2 getDataBase() . . . 8

3.2.3.3 getDataSize() . . . 8

3.2.3.4 mean() . . . 8

3.2.3.5 show() . . . 9

3.2.3.6 standartDeviation() . . . 9

3.2.3.7 variance() . . . 9

3.3 xorShift Class Reference . . . 9

3.3.1 Detailed Description . . . 10

3.3.2 Constructor & Destructor Documentation . . . 10

3.3.2.1 xorShift() . . . 10

3.3.3 Member Function Documentation . . . 10

3.3.3.1 rand() . . . 10

3.3.3.2 srand() . . . 10

4 File Documentation 13

4.1 CMakeLists.txt File Reference . . . 13

4.2 congrRand.cpp File Reference . . . 13

4.3 congrRand.h File Reference . . . 14

4.4 main.cpp File Reference . . . 14

4.4.1 Function Documentation . . . 15

4.4.1.1 generateVib() . . . 15

4.4.1.2 getIntervalNumber() 15
4.4.1.3 main() 15
4.5 viborki.cpp File Reference 16
4.6 viborki.h File Reference 16
4.7 xorshift.cpp File Reference 17
4.8 xorshift.h File Reference 18

Index **19**

Chapter 1

Class Index

1.1 Class List

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

congrRand 5

viborki 6

xorShift 9

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

congrRand.cpp 13
congrRand.h 14
main.cpp 14
viborki.cpp 16
viborki.h 16
xorshift.cpp 17
xorshift.h 18

Chapter 3

Class Documentation

3.1 congrRand Class Reference

`#include <congrRand.h>`

Public Member Functions

- congrRand ()
- int rand ()
- void srand (unsigned int seed)

3.1.1 Detailed Description

Author

Version

1.0

Date

2023

, , .

3.1.2 Constructor & Destructor Documentation

3.1.2.1 congrRand()

```
congrRand::congrRand ( )  [inline]
```

3.1.3 Member Function Documentation

3.1.3.1 rand()

```
int congrRand::rand ( )
```

Returns

3.1.3.2 srand()

```
void congrRand::srand (
            unsigned int seed )
```

Parameters

[seed]	

Returns

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

- congrRand.h
- congrRand.cpp

3.2 viborki Class Reference

```
#include <viborki.h>
```

Public Member Functions

- viborki (congrRand &randomer, const int quantity)
- viborki (xorShift &randomer, const int quantity)
- viborki (const int quatity)
- long double mean ()
- long double variance ()
- long double standartDeviation ()
- long double coefficientOfVariation ()
- unsigned int getDataSize ()
- vector< long double > getDataBase ()
- void show ()

3.2.1 Detailed Description

Author

Version

1.0

Date

2023

. ,, , , , .

3.2.2 Constructor & Destructor Documentation

3.2.2.1 viborki() [1/3]

```
viborki::viborki (
            congrRand & randomer,
            const int quantity )
```

3.2.2.2 viborki() [2/3]

```
viborki::viborki (
            xorShift & randomer,
            const int quantity )
```

3.2.2.3 viborki() [3/3]

```
viborki::viborki (
            const int quatity )
```

3.2.3 Member Function Documentation

3.2.3.1 coefficientOfVariation()

```
long double viborki::coefficientOfVariation ( )
```

Returns

3.2.3.2 getDataBase()

```
vector<long double> viborki::getDataBase ( )  [inline]
```

3.2.3.3 getDataSize()

```
unsigned int viborki::getDataSize ( )  [inline]
```

3.2.3.4 mean()

```
long double viborki::mean ( )
```

Returns

3.2.3.5 show()

```
void viborki::show ( )  [inline]
```

3.2.3.6 standartDeviation()

```
long double viborki::standartDeviation ( )
```

Returns

3.2.3.7 variance()

```
long double viborki::variance ( )
```

Returns

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

- viborki.h
- viborki.cpp

3.3 xorShift Class Reference

```
#include <xorshift.h>
```

Public Member Functions

- xorShift ()
- int rand ()
- void srand (unsigned int seed)

3.3.1 Detailed Description

Author

Version

1.0

Date

2023

, , .

3.3.2 Constructor & Destructor Documentation

3.3.2.1 xorShift()

```
xorShift::xorShift ( )  [inline]
```

3.3.3 Member Function Documentation

3.3.3.1 rand()

```
int xorShift::rand ( )
```

Returns

3.3.3.2 srand()

```
void xorShift::srand (
            unsigned int seed )
```

Parameters

[seed]	

Returns

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

- xorshift.h
- xorshift.cpp

Chapter 4

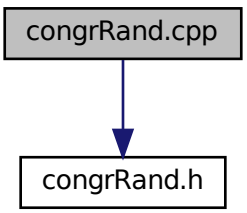
File Documentation

4.1 CMakeLists.txt File Reference

4.2 congrRand.cpp File Reference

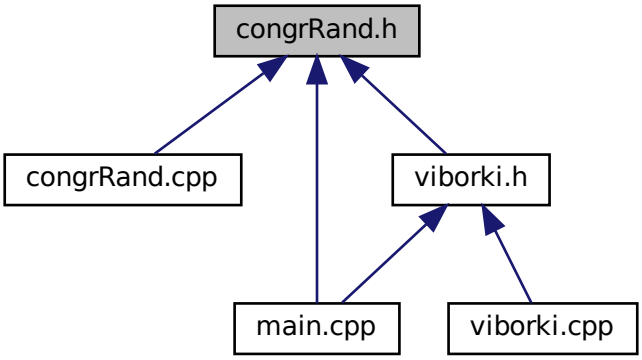
```
#include "congrRand.h"
```

Include dependency graph for congrRand.cpp:



4.3 congrRand.h File Reference

This graph shows which files directly or indirectly include this file:



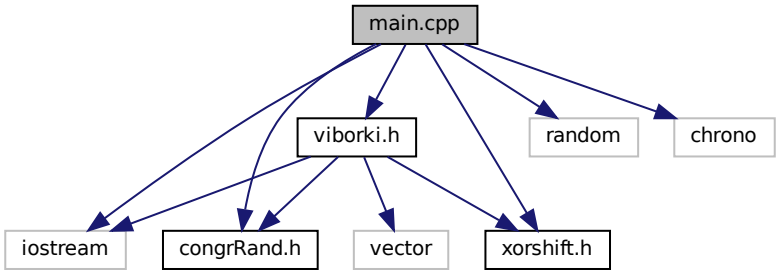
Classes

- class congrRand

4.4 main.cpp File Reference

```
#include <iostream>
#include "congrRand.h"
#include "xorshift.h"
#include "viborki.h"
#include <random>
#include <chrono>
```

Include dependency graph for main.cpp:



Functions

- void generateVib (int q, int a)
- int getIntervalNumber (const double e)
- int main ()

4.4.1 Function Documentation

4.4.1.1 generateVib()

```
void generateVib (
            int q,
            int a )
```

Returns

4.4.1.2 getIntervalNumber()

```
int getIntervalNumber (
            const double e )
```

-

Parameters

[]	

Returns

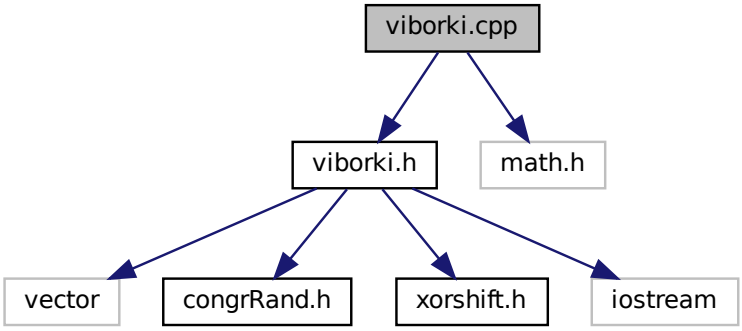
4.4.1.3 main()

```
int main ( )
```

4.5 viborki.cpp File Reference

```
#include "viborki.h"
#include <math.h>
```

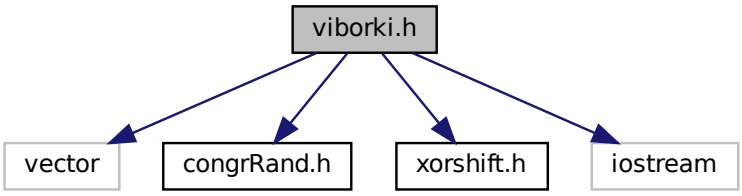
Include dependency graph for viborki.cpp:



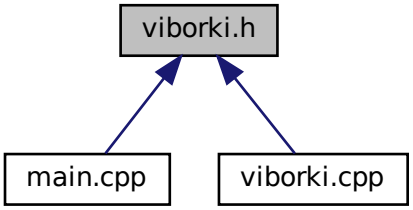
4.6 viborki.h File Reference

```
#include <vector>
#include "congrRand.h"
#include "xorshift.h"
#include <iostream>
```

Include dependency graph for viborki.h:



This graph shows which files directly or indirectly include this file:



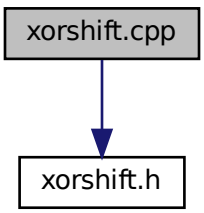
Classes

- class viborki

4.7 xorshift.cpp File Reference

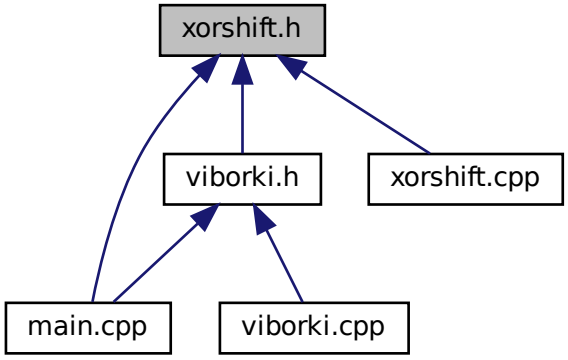
```
#include "xorshift.h"
```

Include dependency graph for xorshift.cpp:



4.8 xorshift.h File Reference

This graph shows which files directly or indirectly include this file:



Classes

- class xorShift

Index

CMakeLists.txt, 13
coefficientOfVariation
    viborki, 8
congrRand, 5
    congrRand, 5
    rand, 6
    srand, 6
congrRand.cpp, 13
congrRand.h, 14

generateVib
    main.cpp, 15
getDataBase
    viborki, 8
getDataSize
    viborki, 8
getIntervalNumber
    main.cpp, 15

main
    main.cpp, 15
main.cpp, 14
    generateVib, 15
    getIntervalNumber, 15
    main, 15
mean
    viborki, 8

rand
    congrRand, 6
    xorShift, 10

show
    viborki, 8
srand
    congrRand, 6
    xorShift, 10
standartDeviation
    viborki, 9

variance
    viborki, 9
viborki, 6
    coefficientOfVariation, 8
    getDataBase, 8
    getDataSize, 8
    mean, 8
    show, 8
    standartDeviation, 9
    variance, 9
    viborki, 7
viborki.cpp, 16
viborki.h, 16

xorShift, 9
    rand, 10
    srand, 10
    xorShift, 10
xorshift.cpp, 17
xorshift.h, 18