

## CoCoALib - Feature #312

### LongRange(a,b) returning vector of long a..b (included)

14 Feb 2013 12:35 - Anna Maria Bigatti

<b>Status:</b>	Closed	<b>Start date:</b>	14 Feb 2013
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Anna Maria Bigatti	<b>% Done:</b>	100%
<b>Category:</b>	New Function	<b>Estimated time:</b>	2.00 hours
<b>Target version:</b>	CoCoALib-0.99532	<b>Spent time:</b>	2.10 hours
<b>Description</b>			
I do miss in C++ the convenient cocoa syntax <b>a..b</b> . In fact it is particularly useful for calling <b>submat</b> . So I suggest having <b>LongRange</b> in <b>utils.H</b> (that implies including in it <b>vector.H</b> )			
<b>Related issues:</b>			
Related to CoCoALib - Feature #357: Constructor for vectors? CoCoAVector		<b>Rejected</b>	<b>24 May 2013</b>
Related to CoCoALib - Feature #1472: Idea for for loops		<b>In Progress</b>	<b>23 Jul 2020</b>
Related to CoCoALib - Feature #202: MatrixView/function for viewing a single ...		<b>Closed</b>	<b>04 Jul 2012</b>
Related to CoCoALib - Design #64: submat takes only vector<long>		<b>Closed</b>	<b>15 Dec 2011</b>
Related to CoCoALib - Design #601: LongRange: in which file should it be decl...		<b>In Progress</b>	<b>31 Jul 2014</b>
Related to CoCoALib - Feature #1788: New MatrixView/function "FirstRows/First...		<b>Closed</b>	<b>08 Mar 2024</b>

### History

#### #1 - 14 Feb 2013 16:04 - John Abbott

It is a shame to have to include the standard header <vector> in the file utils.H.

It may not be relevant, but I notice that there is a file ULong2Long.H which contains essentially one inline fn. So we could put **LongRange** into a separate file.

However, I believe ULong2Long is in a separate file for a specific good reason: so that the test compilations made by the configure-time script cpp-flags-ulong2long.sh are particularly simple.

#### #2 - 15 Feb 2013 18:54 - John Abbott

It's not very important, but JAA thinks that **LongRange** should not be inline:  
its impl is not that short, and run-time efficiency is not that crucial (e.g. it won't be called millions of times).

Unfortunately, making it not inline does not let us remove #include <vector> from the header file... sigh! Maybe some future version of C++ will allow it...?

#### #3 - 24 May 2013 18:58 - Anna Maria Bigatti

- Category set to New Function
- Status changed from New to Feedback
- Assignee set to Anna Maria Bigatti
- Target version set to CoCoALib-0.9953
- % Done changed from 0 to 90

**#4 - 03 Jun 2013 17:38 - John Abbott**

It might be worth moving the impl into its own **separate file**: this would remove the need to include vector in the header file for utils.

**#5 - 29 Oct 2013 13:50 - Anna Maria Bigatti**

John Abbott wrote:

It might be worth moving the impl into its own **separate file**: this would remove the need to include vector in the header file for utils.

I think we'd better keep it in utils: if we find that we have a suitable number of "utils" needing vector we will make a separate file for them and move there **LongRange**

**#6 - 21 Mar 2014 14:29 - Anna Maria Bigatti**

- Target version changed from CoCoALib-0.9953 to CoCoALib-0.99532

**#7 - 01 Apr 2014 19:15 - Anna Maria Bigatti**

- Estimated time set to 2.00 h

**#8 - 02 Apr 2014 07:33 - Anna Maria Bigatti**

I added some commented out calls to **LongRange** (to replace the existing for loops).  
For paranoia, needs testing (not my code, mainly ApproxPts2)

**#9 - 03 Apr 2014 11:38 - John Abbott**

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

No problems in almost a year --> closing.

**#10 - 23 Jul 2020 20:40 - John Abbott**

- Related to Feature #1472: Idea for for loops added

**#11 - 08 Mar 2024 09:05 - Anna Maria Bigatti**

- Related to Feature #202: MatrixView/function for viewing a single row or column (RowMat, ColMat) added

**#12 - 08 Mar 2024 09:16 - Anna Maria Bigatti**

- Related to Design #64: submat takes only vector<long> added

**#13 - 08 Mar 2024 09:16 - Anna Maria Bigatti**

- Related to Design #601: LongRange: in which file should it be declared/defined? added

**#14 - 08 Mar 2024 10:12 - Anna Maria Bigatti**

- Related to Feature #1788: New MatrixView/function "FirstRows/FirstCols"? added