CoCoALib - Bug #264

Compilation problem with "degree.H" (inline fn defns)

12 Oct 2012 19:22 - Anna Maria Bigatti

Status:	Closed	**Start date:**	12 Oct 2012
Priority:	High	**Due date:**	
Assignee:		**% Done:**	100%
Category:	Various	**Estimated time:**	1.00 hour
Target version:	CoCoALib-0.99534 Seoul14	**Spent time:**	1.05 hour

Description

I have a very strange problem compiling the debug2 version.
(indeed it is not related with debugging at all, but with a file I have only in my debug directory!)

It seems that adding

```
#include "CoCoA/degree.H"
```

in some .C files (e.g. PPOrdering.C) causes this compilation error

```
../../include/CoCoA/utils.H: In function 'int CoCoA::LexCmp3(InputIterator1, InputIterator1, Input
Iterator2, InputIterator2) [with InputIterator1 = const CoCoA::BigInt*, InputIterator2 = const CoC
oA::BigInt*]':
../../include/CoCoA/degree.H:89:   instantiated from here
../../include/CoCoA/utils.H:96: error: no matching function for call to 'cmp(const CoCoA::BigInt&,
 const CoCoA::BigInt&)'
../../include/CoCoA/ring.H:327: note: candidates are: int CoCoA::cmp(CoCoA::ConstRefRingElem, CoCo
A::ConstRefRingElem)
../../include/CoCoA/ring.H:358: note:              int CoCoA::cmp(CoCoA::ConstRefRingElem, cons
t CoCoA::MachineInt&)
```

Related issues:

Related to CoCoALib - Bug #591: Problem with template instantiation and order...	**In Progress**	**16 Jul 2014**

History

#1 - 12 Oct 2012 19:23 - Anna Maria Bigatti

- Category set to Various

#2 - 14 Oct 2012 16:27 - John Abbott

Try adding (in the right place...)

```
#include "CoCoA/IntOperations.H"
```

#3 - 03 Jun 2013 17:26 - John Abbott

- Subject changed from Compilation problem with "degree.H" to Compilation problem with "degree.H" (inline fn defns)

- Status changed from New to In Progress

- Target version set to CoCoALib-0.99534 Seoul14

- % Done changed from 0 to 10

Why are the ctor and the mem fn FastCmp inline?
Now that the components of the degree vector are BigInt, I doubt that making these fns inline really gains much run speed at all.

MAKE TIMING OF CODE AS IT IS
MAKE CTOR AND FASTCMP not **INLINE** then **COMPARE TIMINGS**.
If there is not much penalty, make the fns **out of line**.

#4 - 29 Oct 2013 14:57 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-0.99532

#5 - 01 Apr 2014 17:26 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99532 to CoCoALib-0.99533 Easter14

#6 - 07 Apr 2014 18:23 - John Abbott

- Target version changed from CoCoALib-0.99533 Easter14 to CoCoALib-0.99534 Seoul14

#7 - 20 May 2014 10:37 - John Abbott

Is this still a problem?

#8 - 09 Jul 2014 17:59 - John Abbott

@Anna Is this still a problem? I hope not; then we can just terminate the issue.

#9 - 09 Jul 2014 18:15 - Anna Maria Bigatti

- Status changed from In Progress to Closed

- % Done changed from 10 to 100

- Estimated time set to 1.00 h

No problem has ever occurred to anyone in the last year.
Have we fixed it? can't remember.
Has the compiler changed? don't think so.
....Closing.

#10 - 16 Jul 2014 14:42 - John Abbott

This seems to be **very similar** to the issue #591; I believe they are occurrences of the same phenomenon. Added #591 as "related".