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Line by line c - c++ code debugging in Linux ubuntu [closed]

I am coding using gedit in ubuntu and running program in terminal. While working in windows using TurboC or netbeans we can debug code line by line. How can we do it in ubuntu terminal? or any other option?

c++ c debugging

asked Aug 16 '13 at 10:38



user123

2,216 7 34 73

closed as off-topic by [Rostyslav Dzinko](#), [Joni](#), [devnull](#), [RiaD](#), [marko](#) Aug 17 '13 at 17:56

This question appears to be off-topic. The users who voted to close gave this specific reason:

- "Questions asking us to **recommend or find a tool, library or favorite off-site resource** are off-topic for Stack Overflow as they tend to attract opinionated answers and spam. Instead, [describe the problem](#) and what has been done so far to solve it." – [Rostyslav Dzinko](#), [Joni](#), [RiaD](#), [marko](#)

If this question can be reworded to fit the rules in the [help center](#), please [edit the question](#).

5 You can use gdb – [Rostyslav Dzinko](#) Aug 16 '13 at 10:39

This question appears to be off-topic because it is about ubuntu. – [devnull](#) Aug 16 '13 at 18:05

4 Answers

gdb (The Gnu debugger) is best choice

apt-get install gdb

man gdb

```
1.  cc -g file.c           //      compile your program ,this will generate a.out
   file with required debugging information

2.  gdb a.out              //      start with gdb

3.  b main                 //      to set break point at main

4.  run                    //      run now , and it will stop at break point main

5.  s                     //      option s is to step single line and even step
   into functions

6.  n                     //      option n is to execute next line and step over
   functions

7.  p variable name       //      to print the value of variable at that particular
   instance very helpful
```

man gdb will give more info

All useful gdb commands and an example with simple cpp program are given [Here](#)

[GDB Documentation](#)

edited Aug 16 '13 at 11:40

answered Aug 16 '13 at 10:41



I find GDB (Gnu Debugger) to be the best tool for c/c++. It's probably already installed on your system if you have gcc installed.

To use it, make sure you compile your program with the `-g` flag:

```
gcc -g myprog.c -o myprog
```

And then launch the debugger with

```
gdb ./myprog
```

Here are some basic commands to get you going:

```
b lineno      - set a break point at line 'lineno'
b srcfile:lineno - set a break point in source file 'srcfile' at line 'lineno'
r             - run the program
s             - step through the next line of code
c             - continue execution up to the next breakpoint
p varname     - print the value of the variable 'varname'
```

answered Aug 16 '13 at 10:47

AlexJ136
748 1 7 15

You can use an IDE(http://en.wikipedia.org/wiki/Integrated_development_environment) which provides code management, highlighting, debugging facilities. You may try any of these.

- QtCreator (<http://qt-project.org/wiki/Category:Tools::QtCreator>)
- KDevelop (<http://www.kdevelop.org/>)
- Eclipse (<http://www.eclipse.org/>)

or you may choose to use `gdb` (<https://www.gnu.org/software/gdb/>) directly from the command line.

edited Aug 16 '13 at 10:59

answered Aug 16 '13 at 10:41

HAL
1,792 1 10 20

You can use `gdb` for this.

Install `gdb` if it isn't already installed.

```
sudo apt-get install gdb
```

Then you can debug the executable of choice as follows

```
gdb <executable name>
```

You get a complete interactive debug session.

answered Aug 16 '13 at 10:43

amrith
797 3 17

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C is a general-purpose computer programming language for developing operating systems, libraries, games and other high performance work. It is clearly distinct from C++. It was developed in 1972 by Dennis Ritchie for use with the Unix operating system. The language is standardised as ISO 9899.

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