

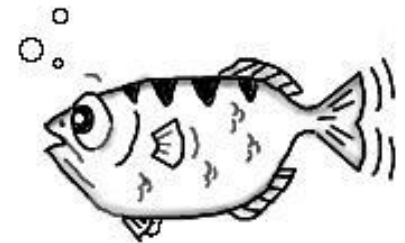
# GDB Tutorial

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C/C++ Language

# What is GDB?

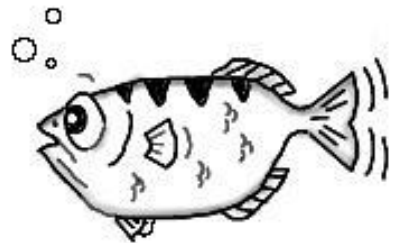
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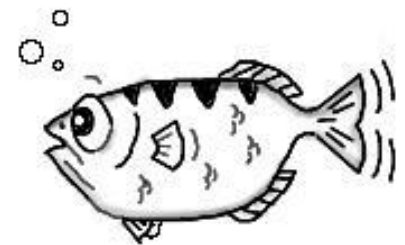
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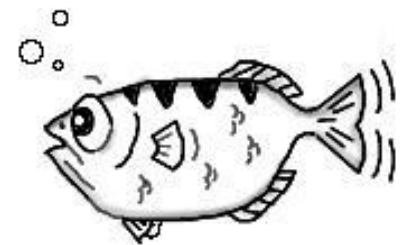
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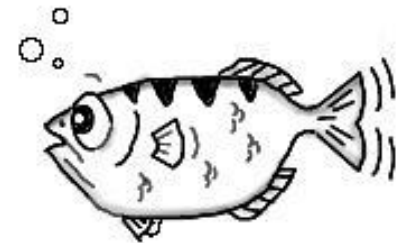
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- Make your program stop on specified conditions.
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“GDB, the GNU Project debugger, allows you to see what is going on `inside' another program while it executes -- or what another program was doing at the moment it crashed.”

- Start your program, specifying anything that might affect its behavior.
- Make your program stop on specified conditions.
- Examine what has happened, when your program has stopped.
- Change things in your program, so you can experiment with correcting the effects of one bug and go on to learn about another.



# How to use?

- Compile with -g option
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# How to use?

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  - `$g++ -g -o test.cpp test`
- Run gdb
  - `$gdb ./test`
- Lots of commands, lots of resources
  - `$man gdb`
  - <https://people.eecs.berkeley.edu/~mavam/teaching/cs161-sp11/gdb-refcard.pdf>
  - [https://www.tutorialspoint.com/gnu\\_debugger/gdb\\_commands.htm](https://www.tutorialspoint.com/gnu_debugger/gdb_commands.htm)
  - <http://freemmer.tistory.com/31>

# Useful commands

- Run (r) : runs the program
  - Quit (q) : quit gdb
  - Break (b) : set a break point
  - Next (n) : executes one following line of code
  - List (l) : prints 10 following lines of code
  - Print (p) : prints a variable
- 
- Info threads
  - thread #

# Example 1

# lfqueue.cpp

# example2

# Thank You

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