

GDB

-The GNU Project debugger-

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GDB

- GDB can help you to debug.
 - Can stop your program on the breakpoints.
 - Check the value of variables anytime.
 - Go through the program step by step.
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- GDB regards the program as frames.
 - The block which is executing now is frame0, the block which called frame0 is frame1, and so on.

GDB in Linux

- Command to compile:
 - `gcc -o test test.c`
- To generate debug information:
 - `gcc -g -o test test.c`
- Run the program:
 - `gdb ./test`

Common Command(1)

- `help`: show simple explanation of the command.
- `run`: execute the program.
- `kill`: stop the program.
- `list`: show the code of the program.
- `quit`: quit gdb.

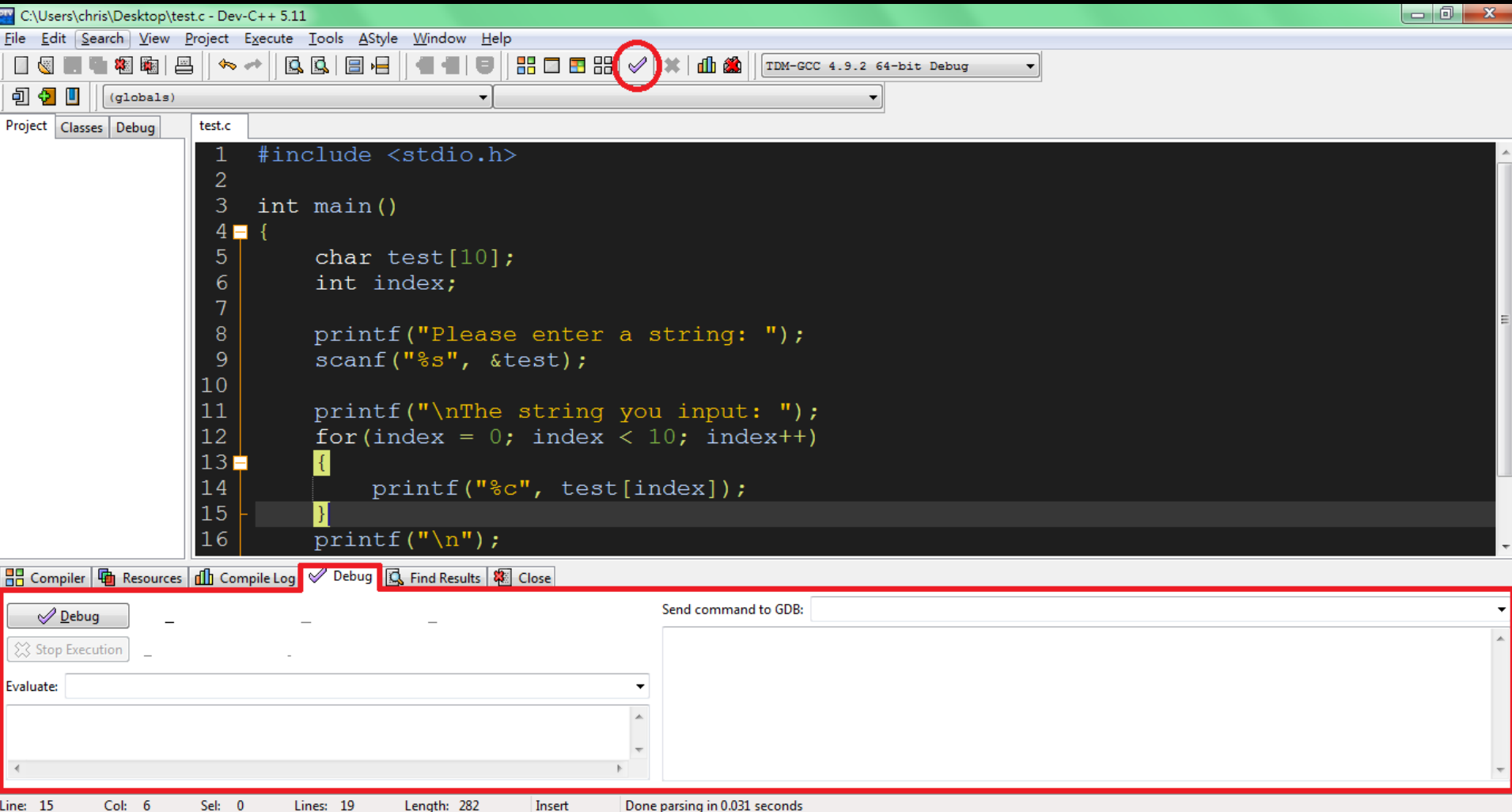
Common Command (2)

- `breakpoint`: set breakpoints.
- `clear/delete`: delete a breakpoint.
- `continue`: continue to run. (stop by breakpoints)
- `next`: execute by single step. (will not enter frame)
- `step`: same as next, but will enter frame.
- `until`: run one loop of while.
- `finish`: finish the frame.

Common Command (3)

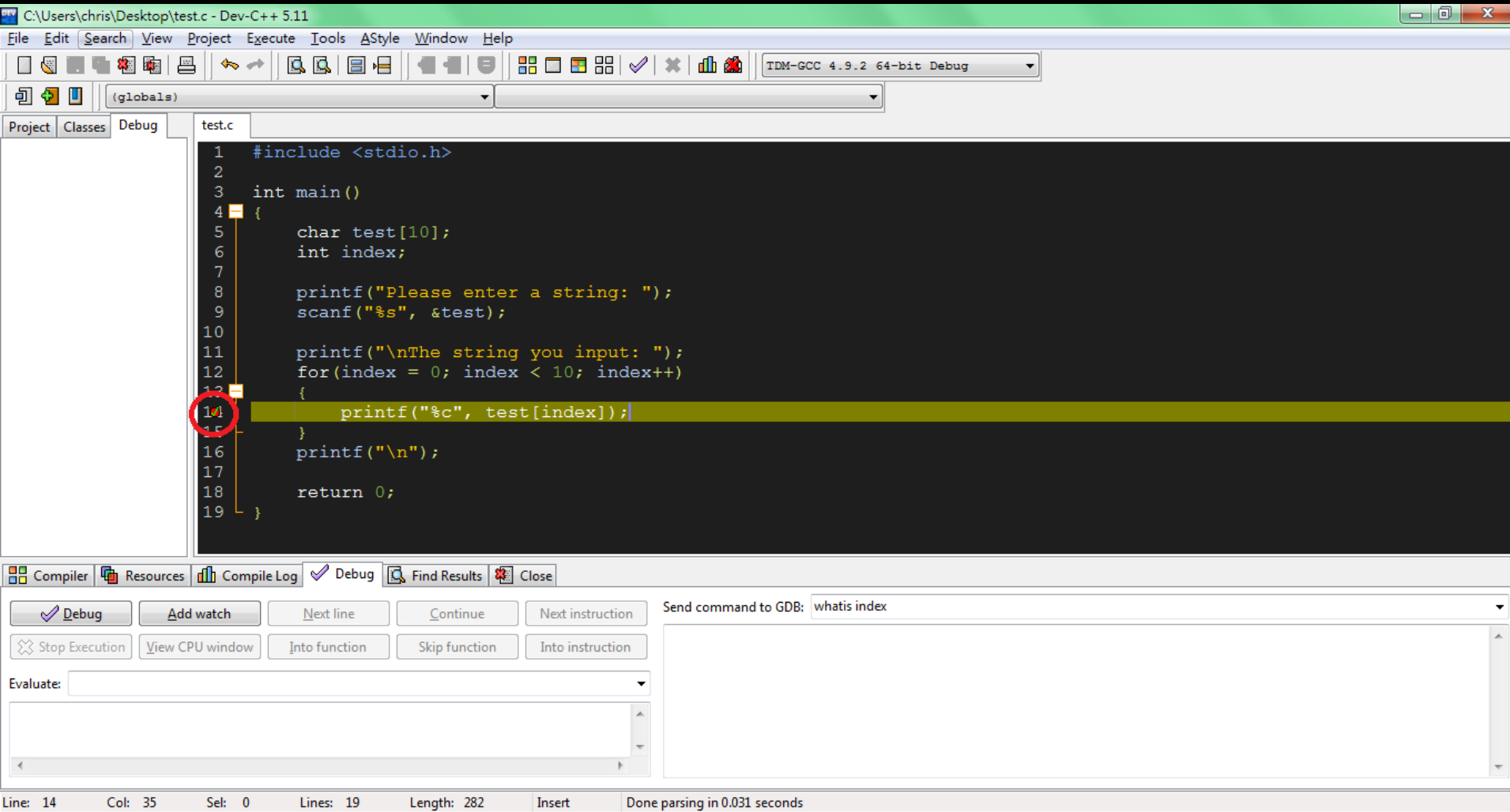
- `print`: show the value of the variable.
- `whatis`: show the type of the variable.
- `display`: when stop by breakpoints, show the value of some variables automatically.
- `info`: show information of something.

GDB in DEV-C++



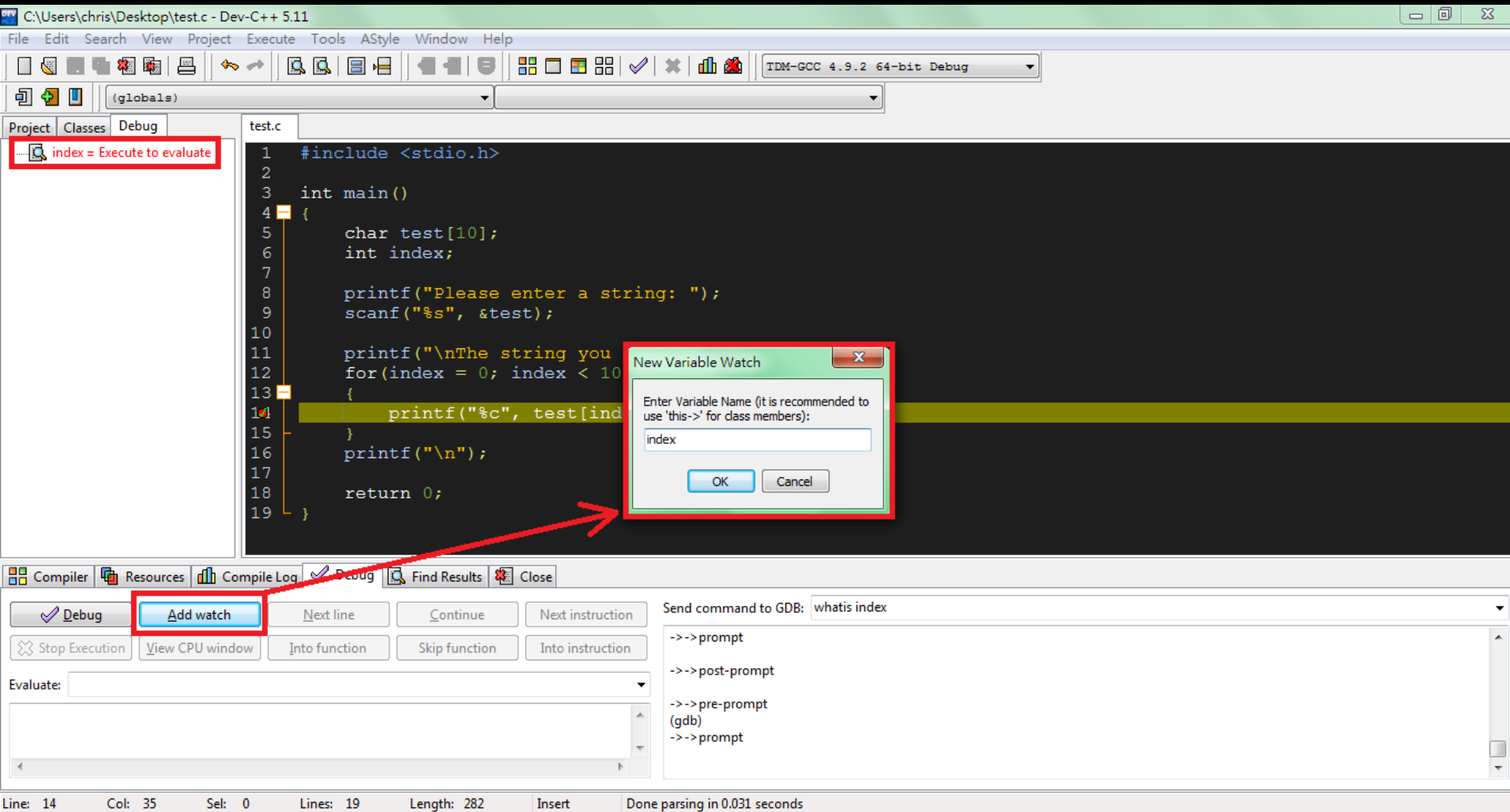
GDB in DEV-C++

- set breakpoint: (or press 'F4')



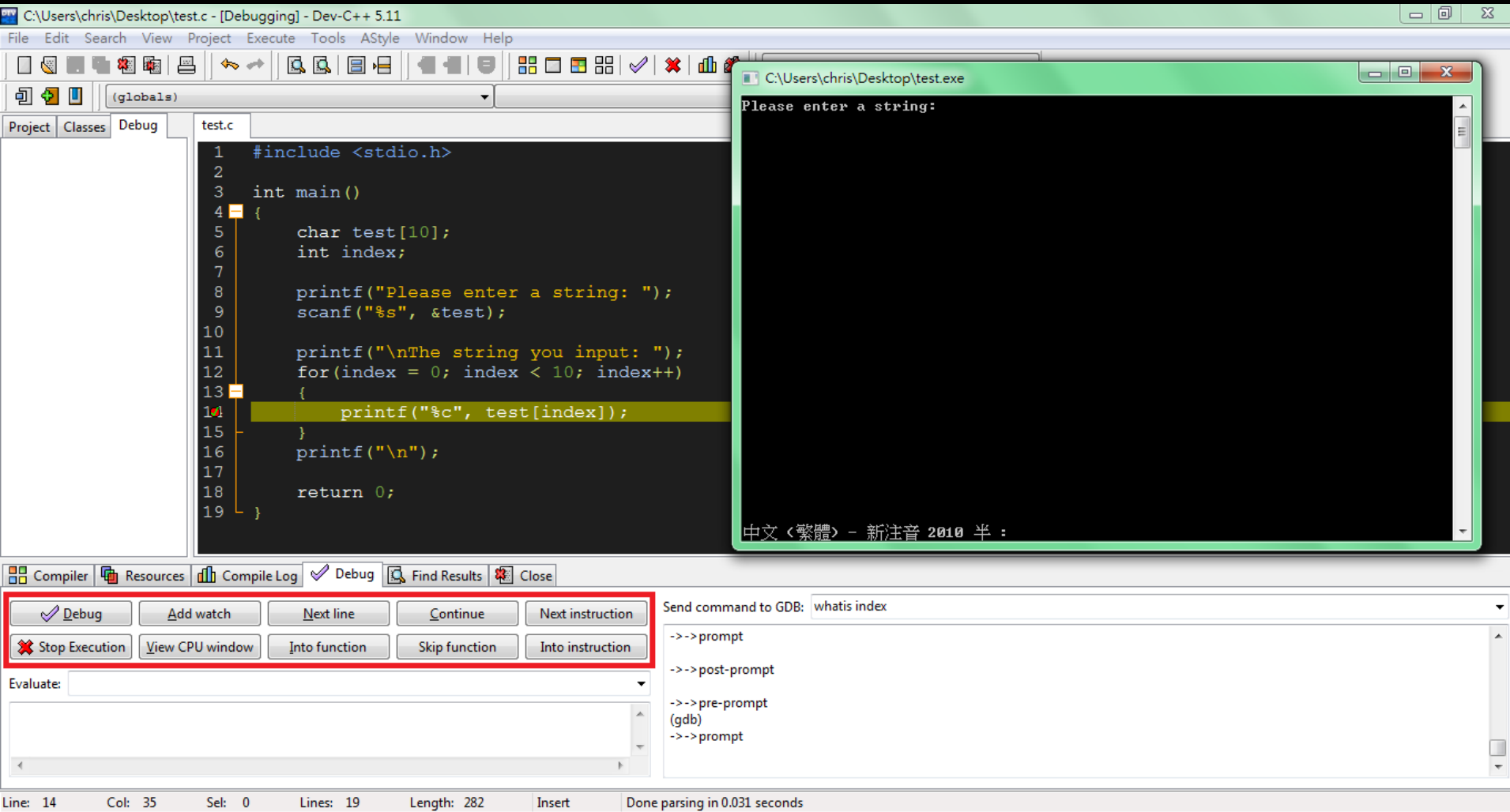
GDB in DEV-C++

- display:



GDB in DEV-C++

- other command:



GDB User Manual

<https://sourceware.org/gdb/current/onlinedocs/gdb/>

THANKS FOR LISTENING.