

# **Advanced Programming in the UNIX Environment**

## **Week 05, Segment 10: Unix Development Tools: Using gdb(1), Part II**

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```
a 19         }
20
21         printf("%d\n", fib(atoi(argv[1])));
(gdb) br 21
Breakpoint 1 at 0x400a36: file fib.c, line 21.
(gdb) apue$
apue$ vim fib.c
apue$ cc -g fib.c
apue$ ./a.out 7
13
apue$ for i in `seq 10`; do
> ./a.out $i
> done
1
1
2
3
5
8
13
21
34
55
apue$
```

**Ctrl-X o**

## Using a debugger

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The purpose of a debugger such as `gdb(1)` is to allow you to see what is going on “inside” another program while it executes or what it was doing at the moment it crashed.

- we can “pause” program execution at a specific point in our code by setting a “breakpoint”
- we can advance through our code via e.g., the “next” and “step” commands
- we can watch as the program runs line by line alongside our code