

# Princeton University

## COS 217: Introduction to Programming Systems

### Assembler Output for hello via gdb

```
$ gcc -c hello.s
```

```
$ gdb hello.o
```

```
(gdb) x/9i main
0x0 <pcGreeting>:    push    %ebp
0x1 <pcGreeting+1>:  mov     %esp,%ebp
0x3 <pcGreeting+3>:  push   $0x0
0x8 <pcGreeting+8>:  call   0x9 <pcGreeting+9>
0xd <pcGreeting+13>: add    $0x4,%esp
0x10 <pcGreeting+16>: mov    $0x0,%eax
0x15 <pcGreeting+21>: mov    %ebp,%esp
0x17 <pcGreeting+23>: pop    %ebp
0x18 <pcGreeting+24>: ret
```

```
(gdb) x/25b main
0x0 <pcGreeting>:    0x55    0x89    0xe5    0x68    0x00    0x00    0x00    0x00
0x8 <pcGreeting+8>:    0xe8    0xfc    0xff    0xff    0xff    0x83    0xc4    0x04
0x10 <pcGreeting+16>: 0xb8    0x00    0x00    0x00    0x00    0x89    0xec    0x5d
0x18 <pcGreeting+24>: 0xc3
```

```
(gdb) quit
```