

Princeton University

COS 217: Introduction to Programming Systems

Assembler Output for artificial.S via gdb

```
--> gcc -c -o artificial.o artificial.S
```

```
--> gdb artificial.o
```

```
GNU gdb 4.17
```

```
Copyright 1998 Free Software Foundation, Inc.
```

```
GDB is free software, covered by the GNU General Public License, and you are  
welcome to change it and/or distribute copies of it under certain conditions.
```

```
Type "show copying" to see the conditions.
```

```
There is absolutely no warranty for GDB. Type "show warranty" for details.
```

```
This GDB was configured as "sparc-sun-solaris2.6"...(no debugging symbols found)...
```

```
(gdb) x/10i mylabel-36
```

```
0x0:   add  %g1, %g2, %g3
```

```
0x4:   sub  %g1, %g2, %g3
```

```
0x8:   add  %g1, 4, %g3
```

```
0xc <a>:   add  %g1, 8, %g3
```

```
0x10 <a+4>: sethi %hi(0), %g3
```

```
0x14 <a+8>: bg   0x24 <mylabel>
```

```
0x18 <a+12>: call 0x18 <a+12>
```

```
0x1c <a+16>: ld  [ %g1 + %g2 ], %g3
```

```
0x20 <a+20>: ld  [ %g1 + 4 ], %g3
```

```
0x24 <mylabel>: ld [ %g1 ], %g3
```

```
(gdb) x/10x mylabel-36
```

```
0x0:   0x86004002      0x86204002      0x86006004      0x86006008
```

```
0x10 <a+4>: 0x07000000      0x14800004      0x40000000      0xc6004002
```

```
0x20 <a+20>: 0xc6006004      0xc6004000
```

```
(gdb) quit
```

```
-->
```