```
labex:project/ $ gdb ./hello
GNU gdb (Ubuntu 12.1-0ubuntu1~22.04.2) 12.1
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Type "show copying" and "show warranty" for details.
This GDB was configured as "x86_64-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<https://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
    <http://www.gnu.org/software/gdb/documentation/>.

For help, type "help".
Type "apropos word" to search for commands related to "word"...
```

```
Reading symbols from ./hello...
(No debugging symbols found in ./hello)
(gdb) break _start
Breakpoint 1 at 0x8049000
(gdb) run
Starting program: /home/labex/project/hello

Breakpoint 1, 0x08049000 in _start ()
(gdb) disassembly flavor-intel
Undefined command: "disassembly".  Try "help".
(gdb) set disassembly flavor-intel
Undefined item: "flavor-intel".
(gdb) set disassembly-flavor intel
(gdb) disassemble _start
Dump of assembler code for function _start:
=> 0x08049000 <+0>:     mov     eax,0x4
   0x08049005 <+5>:     mov     ebx,0x1
   0x0804900a <+10>:    mov     ecx,0x804a000
   0x0804900f <+15>:    mov     edx,0x7
```

```
0x08049014 <+20>:      int    0x80
0x08049016 <+22>:      mov    eax,0x4
0x0804901b <+27>:      mov    ebx,0x1
0x08049020 <+32>:      mov    ecx,0x804a007
0x08049025 <+37>:      mov    edx,0x6
0x0804902a <+42>:      int    0x80
0x0804902c <+44>:      mov    eax,0x1
0x08049031 <+49>:      xor    ebx,ebx
0x08049033 <+51>:      int    0x80
```
of assembler dump.
b) layout asm

```
B+> 0x8049000 < _start>       mov     eax,0x4
    0x8049005 < _start+5>     mov     ebx,0x1
    0x804900a < _start+10>    mov     ecx,0x804a000
    0x804900f < _start+15>    mov     edx,0x7
    0x8049014 < _start+20>    int     0x80
    0x8049016 < _start+22>    mov     eax,0x4
    0x804901b < _start+27>    mov     ebx,0x1
    0x8049020 < _start+32>    mov     ecx,0x804a007
    0x8049025 < _start+37>    mov     edx,0x6
    0x804902a < _start+42>    int     0x80
    0x804902c < _start+44>    mov     eax,0x1
    0x8049031 < _start+49>    xor     ebx,ebx
    0x8049033 < _start+51>    int     0x80
    0x8049035                 add     BYTE PTR [eax],al
```

native process 946 In: start   L??   PC: 0x8049000

```
┌─Register group: general──────────────────────────────────────────────────────
eax            0x4                  4                  ecx            0x0                  0
edx            0x0                  0                  ebx            0x1                  1
esp            0xffffd120           0xffffd120         ebp            0x0                  0x0
esi            0x0                  0                  edi            0x0                  0
eip            0x804900a            0x804900a <_start+10>  eflags     0x202                [ IF ]
cs             0x23                 35                 ss             0x2b                 43

B+   0x8049000 <_start>       mov      eax,0x4
     0x8049005 <_start+5>     mov      ebx,0x1
>    0x804900a <_start+10>    mov      ecx,0x804a000
     0x804900f <_start+15>    mov      edx,0x7
     0x8049014 <_start+20>    int      0x80
     0x8049016 <_start+22>    mov      eax,0x4
     0x804901b <_start+27>    mov      ebx,0x1

native process 946 In: _start                                         L??    PC: 0x804900a
(gdb) layout regs
(gdb) nexti
0x08049005 in _start ()
(gdb) nexti
0x0804900a in _start ()
```