

breakdown

Input : 9

```
gef> c
Continuing.
I am your computer genie!
Enter a number from 0 to 9: 9
```

9 : 0x39

Paste text or drop text file

9

Character encoding

ASCII

Output delimiter string (optional)

Space

↻ Convert

✕ Reset

↕ Swap

39

After atoi() is called, sting 0x39 is converted to its integer equivalent which is 9.

```
0x400650 <main+73>      mov     DWORD PTR [rbp-0x4], eax
0x400653 <main+76>      cmp     DWORD PTR [rbp-0x4], 0x4
```

```
gef> i r $eax
eax                                0x9          0x9
gef> x/wx $rbp-4
0x7fffffff41c: 0x00000009
gef> █
```

Compare 9 to 4, zero flag is NOT set
C source code : if (number < 5)

```
0x400653 <main+76>      cmp     DWORD PTR [rbp-0x4], 0x4
0x400657 <main+80>      jg      0x400667 <main+96>      TAKEN [Reason: !Z && S==0]
```

compare 9 to 5, zero flag is NOT SET
C source code: else if (number == 5)

```
0x400667 <main+96>      cmp     DWORD PTR [rbp-0x4], 0x5
0x40066b <main+100>     jne     0x40067b <main+116>      TAKEN [Reason: !Z]
0x40067b <main+116>     cmp     DWORD PTR [rbp-0x4], 0x5
```

compare 9 to 5, zero flag is NOT SET
C source code: else if (number > 5)

```
0x40067b <main+116>     cmp     DWORD PTR [rbp-0x4], 0x5
0x40067f <main+120>     jle     0x40068d <main+134>
0x400681 <main+122>     lea     rdi, [rip+0x107]      # 0x40078f
```