

Getchar() in disassembly

```
0x40053f <main+8>      lea    rdi, [rip+0xc2]      # 0x400608
0x400546 <main+15>     mov     eax, 0x0
0x40054b <main+20>     call   0x400430 <printf@plt>
0x400550 <main+25>     call   0x400440 <getchar@plt>
```

Assignment of values is after getting input

```
0x400550 <main+25>     call   0x400440 <getchar@plt>
gef> ni
Enter your favorite keyboard character -> AAAA|
```

Getchar() stores the input in the rax register

```
gef> i r $rax
rax          0x41      0x41
gef> |
```

Even when we entered 4 A's, it is still stored in the stack as one A(0x41)

```
gef> x/8gx $rbp-16
0x7fffffffef410: 0x00007fffffffef500      0x4100000000000000
0x7fffffffef420: 0x000000000000400580     0x00007ffff7a05b97
0x7fffffffef430: 0x00000000000000001      0x00007ffffffffffe508
0x7fffffffef440: 0x00000000100008000      0x000000000000400537
```