Count is an integer and as such it is a double word

1 word = 2 bytes

2 word = 4 bytes

Initial value of count variable is 1 as evidence by the mov instruction below

```
 →   0x4004ef <main+8>          mov    DWORD PTR [rbp-0x4], 0x1
```

While loop in assembly

Rbp-0x4 contains the current count value.

As long as the current count value is lesser than or equal to 3 , loop continues

```
→   0x400512 <main+43>         cmp    DWORD PTR [rbp-0x4], 0x3
    0x400516 <main+47>         jle    0x4004f8 <main+17>
```

Rdi : current value of count

Rsi: message to be printed and the format specifier

```
 →   0x4004f8 <main+17>         mov    eax, DWORD PTR [rbp-0x4]
     0x4004fb <main+20>         mov    esi, eax
     0x4004fd <main+22>         lea    rdi, [rip+0xa0]        # 0x4005a4
     0x400504 <main+29>         mov    eax, 0x0
     0x400509 <main+34>         call   0x4003f0 <printf@plt>
```

```
gef➤  x/s 0x4005a4
0x4005a4:       "Current value of count : %d\n"
gef➤
```

```
gef➤  i r $rsi
rsi            0x1      0x1
gef➤
```

Setting current count value to 4 and loop will terminate

```
    0x40050e <main+39>         add    DWORD PTR [rbp-0x4], 0x1
    0x400512 <main+43>         cmp    DWORD PTR [rbp-0x4], 0x3
→   0x400516 <main+47>         jle    0x4004f8 <main+17>        NOT taken [Reason: !(Z || S!=O)]
```