When input is ‘Y’

Y = 0x59

```
 →   0x400595 <main+30>          mov    BYTE PTR [rbp-0x1], al
     0x400598 <main+33>          cmp    BYTE PTR [rbp-0x1], 0x59
     0x40059c <main+37>          je     0x4005a4 <main+45>
```

```
gef➤  x/bx $rbp-1
0x7fffffffe41f: 0x59
gef➤
```

0x59 == 0x59 so zero flag is set

```
gef➤  print $eflags
$1 = [ PF ZF IF ]
gef➤
```

When input is ‘y’

y = 0x79

First condition 0x79 != 0x59

```
gef➤  x/bx $rbp-1
0x7fffffffe41f: 0x79
gef➤
```

```
gef➤  print $eflags
$2 = [ IF ]
gef➤
```

```
 →   0x40059c <main+37>          je     0x4005a4 <main+45>          NOT taken [Reason: !(Z)]
```

Since 0x79 = 0x79

Jump is not taken

```
     0x40059e <main+39>          cmp    BYTE PTR [rbp-0x1], 0x79
 →   0x4005a2 <main+43>          jne    0x4005be <main+71>          NOT taken [Reason: !(!Z)]
     0x4005a4 <main+45>          lea    rdi, [rip+0xed]        # 0x400698
     0x4005ab <main+52>          call   0x400460 <puts@plt>
```

```
gef➤  print $eflags
$3 = [ PF ZF IF ]
gef➤
```