Analysis of simplified word processor

Instructions below prints the 2 sentences to the console

```
→   0x40053b <main+4>         lea    rdi, [rip+0xc2]        # 0x400604
    0x400542 <main+11>        call   0x400430 <puts@plt>
    0x400547 <main+16>        lea    rdi, [rip+0xc4]        # 0x400612
    0x40054e <main+23>        call   0x400430 <puts@plt>
```

```
gef➤  x/s 0x400604
0x400604:       "Start typing."
gef➤  x/s 0x400612
0x400612:       "Press q then Enter to stop."
```

As long as character entered isnt q, program loops

Lowercase q is 0x71

For getchar, input is stored in eax

If input for this example is A and it is not equals to q, it will loop

0x41 != 0x71

```
gef➤  i r $eax
eax            0x41     0x41
```

```
    0x400554 <main+29>        call   0x400440 <getchar@plt>
 →  0x400559 <main+34>        cmp    eax, 0x71
```

```
    0x400559 <main+34>        cmp    eax, 0x71
 →  0x40055c <main+37>        jne    0x400554 <main+29>        TAKEN [Reason: !Z]
  ↳     0x400554 <main+29>        call   0x400440 <getchar@plt>
```

```
gef➤  print $eflags
$1 = [ CF SF IF ]
gef➤
```

What happens if input is q or 0x71

```
gef➤  i r $eax
eax            0x71     0x71
gef➤
```

```
    0x400559 <main+34>        cmp    eax, 0x71
 →  0x40055c <main+37>        jne    0x400554 <main+29>        NOT taken [Reason: !(!Z)]
```

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

End message

```
gef➤  x/s 0x40062e
0x40062e:       "\nThanks!"
```

```
0x40055e <main+39>        lea    rdi, [rip+0xc9]        # 0x40062e
0x400565 <main+46>        call   0x400430 <puts@plt>
```