



big
add



36206

,

34064



ret ad

main

ret ad

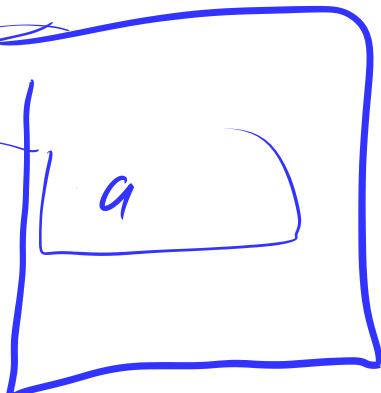
340B

...

...

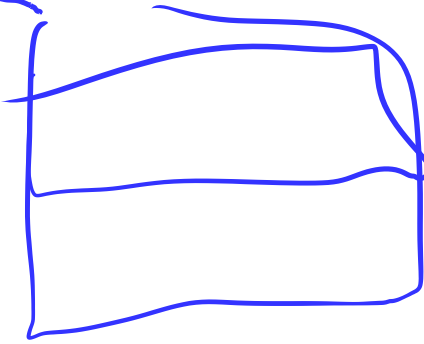
3400

big ad



wSa1

big size



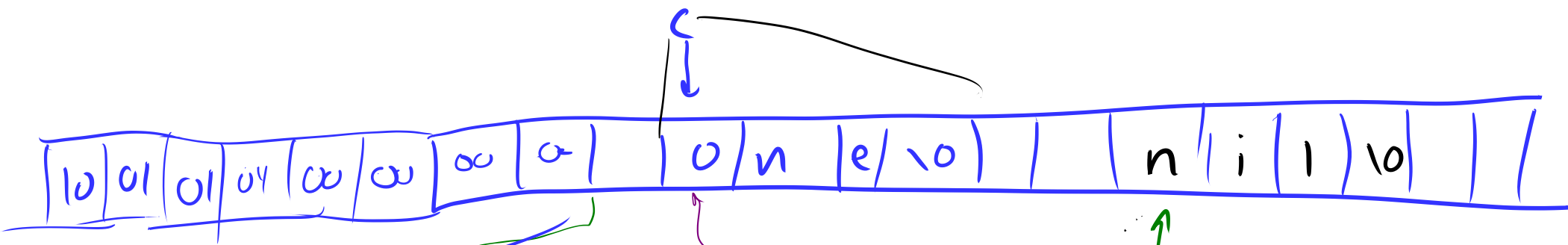
wSa2

Small

JIT

Just-in-time

Compiler



↑
0x4010110

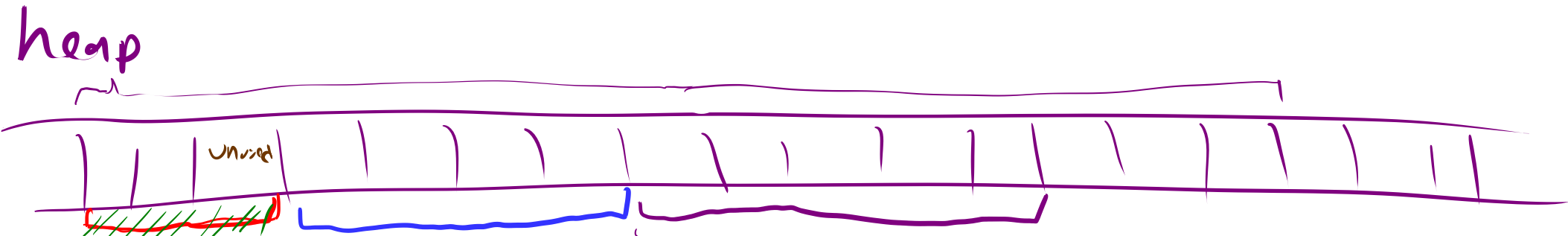
char c[4] = "one"

char *e = "nil"

Print("%p", c)

sizeof(c+2)

e



$x = \text{malloc}(3)$

$y = \text{malloc}(4)$

$\text{free}(x)$

$z = \text{malloc}(5)$

$w = \text{malloc}(2)$

Cache side channel

Use mem access time to see when code runs locally

```
authenticate (user, pw) {  
  if (pw == desired) ok  
  else not
```

```
}
```