



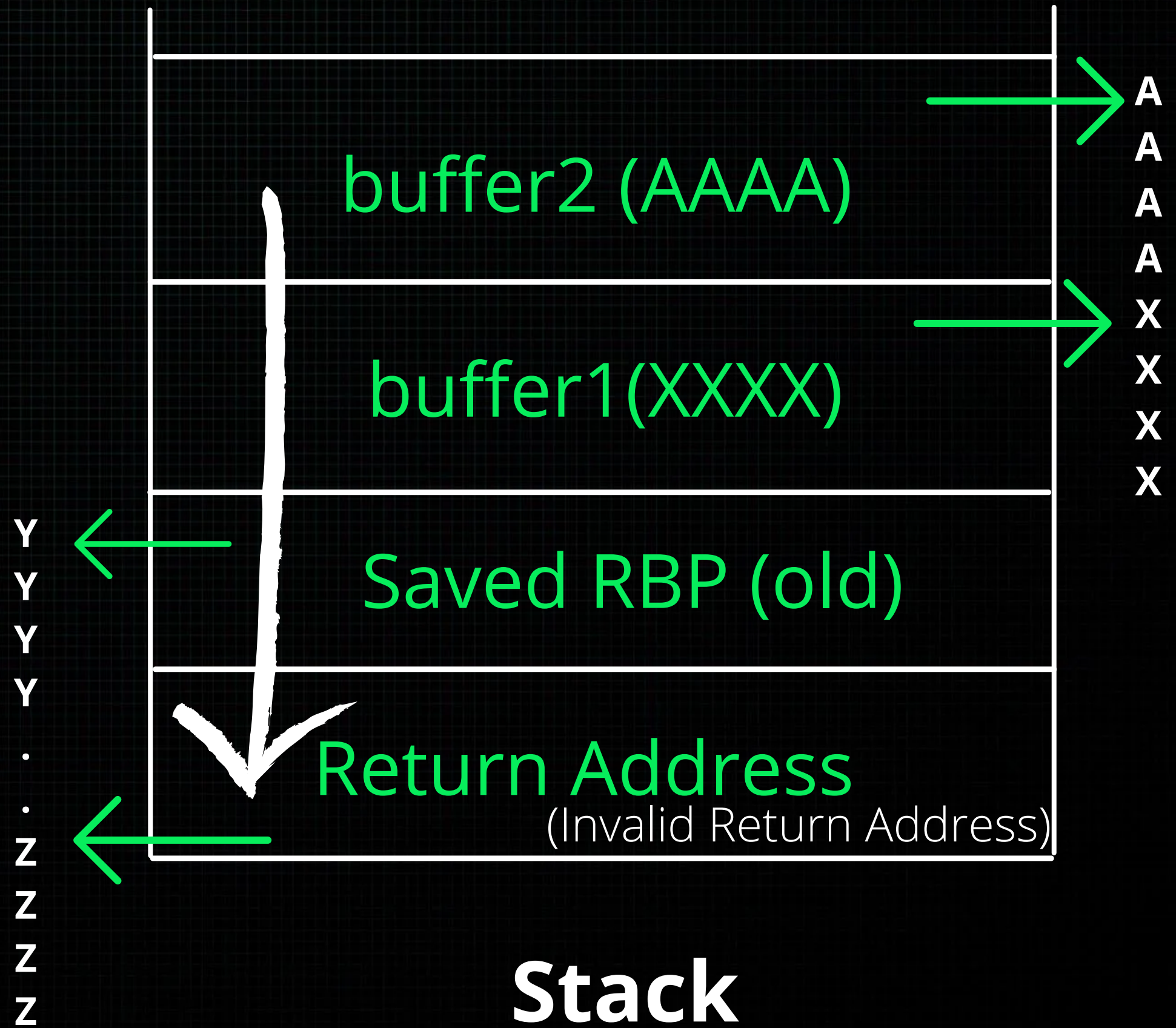
# **Manipulation** of Instruction Pointer

# Overwriting Return Address

Input : AAAAXXXYYYYYYYYZZZZZZZZ

Output: ??????????

IO





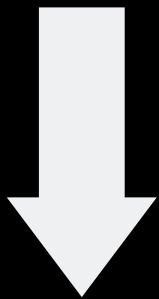
# Stack Smashing



# Endianness

Little Endian

0x1337c0de

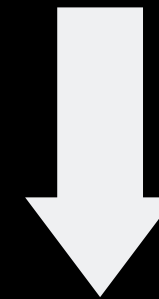


\xde \xc0 \x37 \x13



Big Endian

0x1337c0de



\x13 \x37 \xc0 \xde





# Buffer Overflow Functions

`fgets(stdin,buffer,500)`

`sizeof(buffer) << 500`

`strcpy(buffer,inp_buffer)`

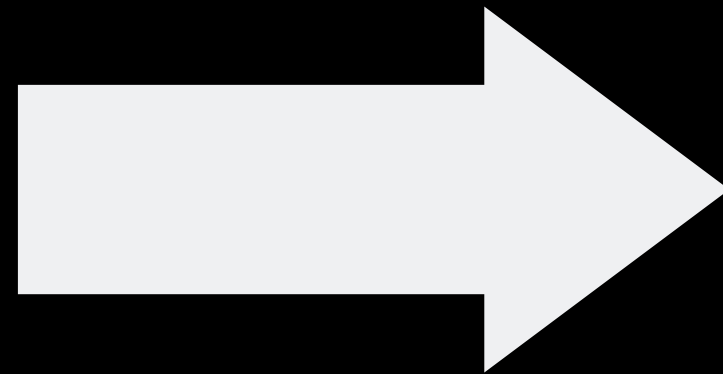
`gets(buffer)`

`scanf("%s",buffer)`

Basically any function that triggers input of more data than a buffer can hold !

# Shellcodes

A F A G A H A B A  
E A D A C A J A  
O A P A Q A R A K  
N A M A L S  
X A Y A Z B A T A  
V A U A C B  
D



BEBFBGBHCACBCDGT
AGTRBEBFBGBHNQRC
BEBFBGBNHJQYXZ12
\$H3LL C0de ACC3p7

anonymous@vulnerable: ~

```
$ cat flag.txt
```

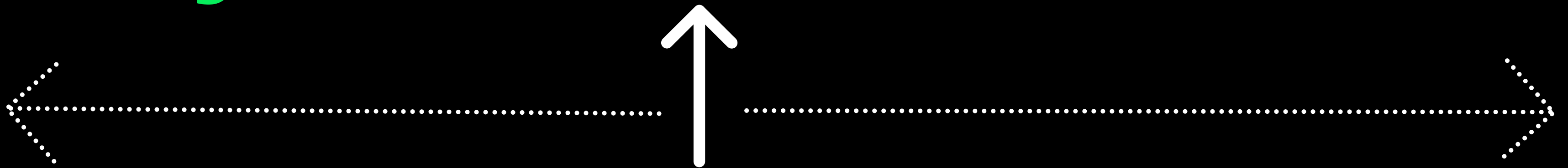
```
GLUG{$H311_C0D3_1S_C00L}
```

anonymous@vulnerable: ~

```
$ exit
```

# Shellcode Deployment

.....j0TYX45Pk13VX4....



Instruction Pointer  
(RIP or EIP)

Find Shellcodes in [shell-storm website](http://shell-storm.org) !





**Thank you for watching**