

Rust

```
fn foo() -> String {
```

```
  let local_string = String::from("hello")
```

```
  & long_string
```

}

C

```
char * bar() {
```

```
  char * cp = (char *) malloc(sizeof(char) * 10);
  strcpy(cp, "hello");
```

```
  return cp;
```

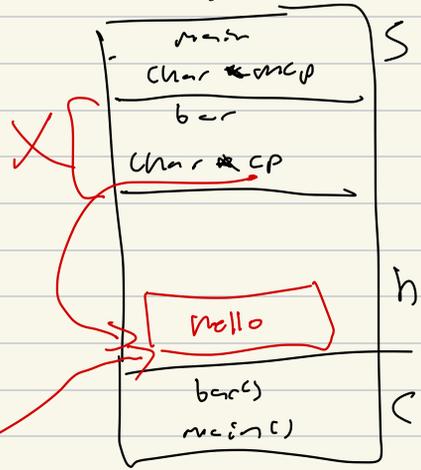
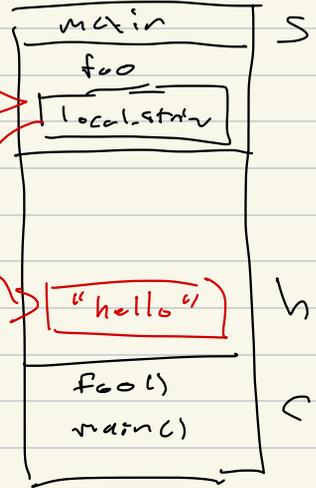
```
}
```

```
Main() {
```

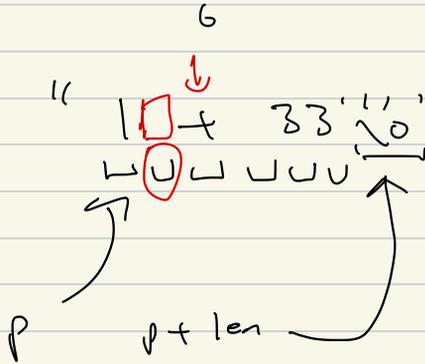
```
  char * mcp;
```

```
  mcp = bar();
```

```
}
```



$end = p + len$



---

pointer operators and structs

& address of

\* dereference

```
struct node_st {
```

```
    int x;
```

```
    int y;
```

```
};
```

```
struct node_st node_j;
```

```
node_j.x = 1;
```

```
node_j.y = 2;
```

foo (struct node\_st \* np) {

np → x = 3    eq    (\*np).x = 3

np → y = 4            (\*np).y = 4

}