

Addressing Modes

CSC231
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Immediate

mov ax, 0x1122

Before...

eax

XXXXXXXX

After...

eax

XXXX1122

Direct

```
mov eax, dword[a]
```

Before...

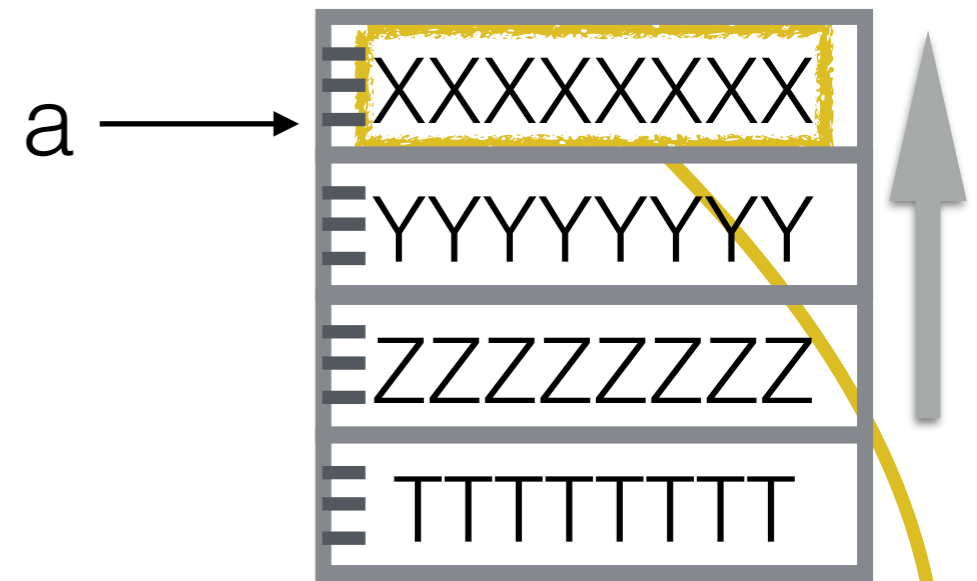
eax

00000000

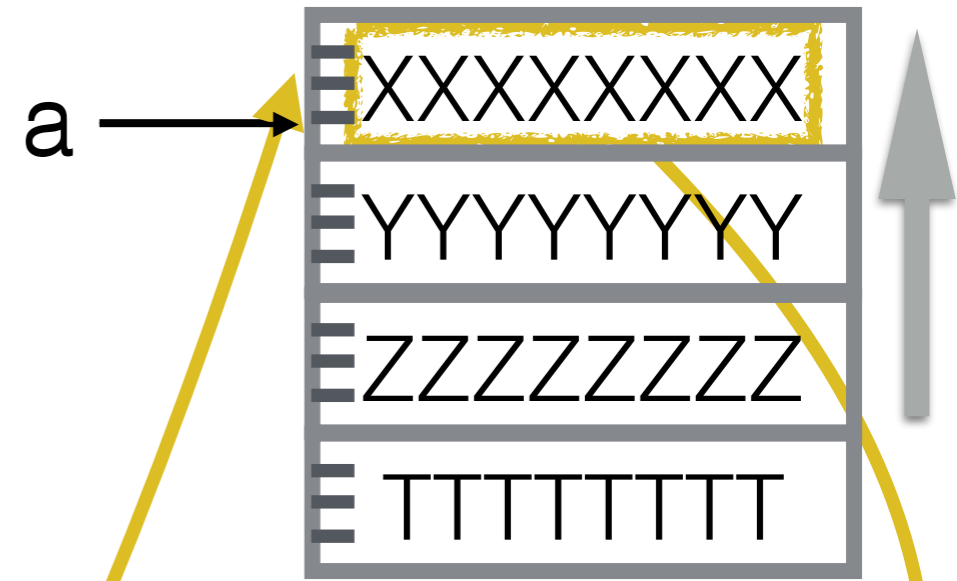
After...

eax

XXXXXXXX

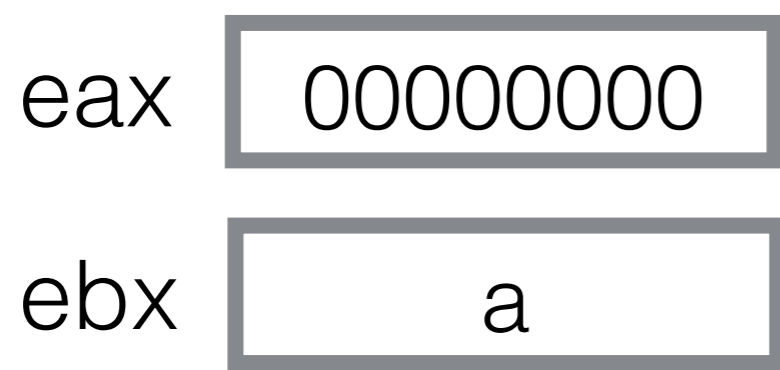


Indirect

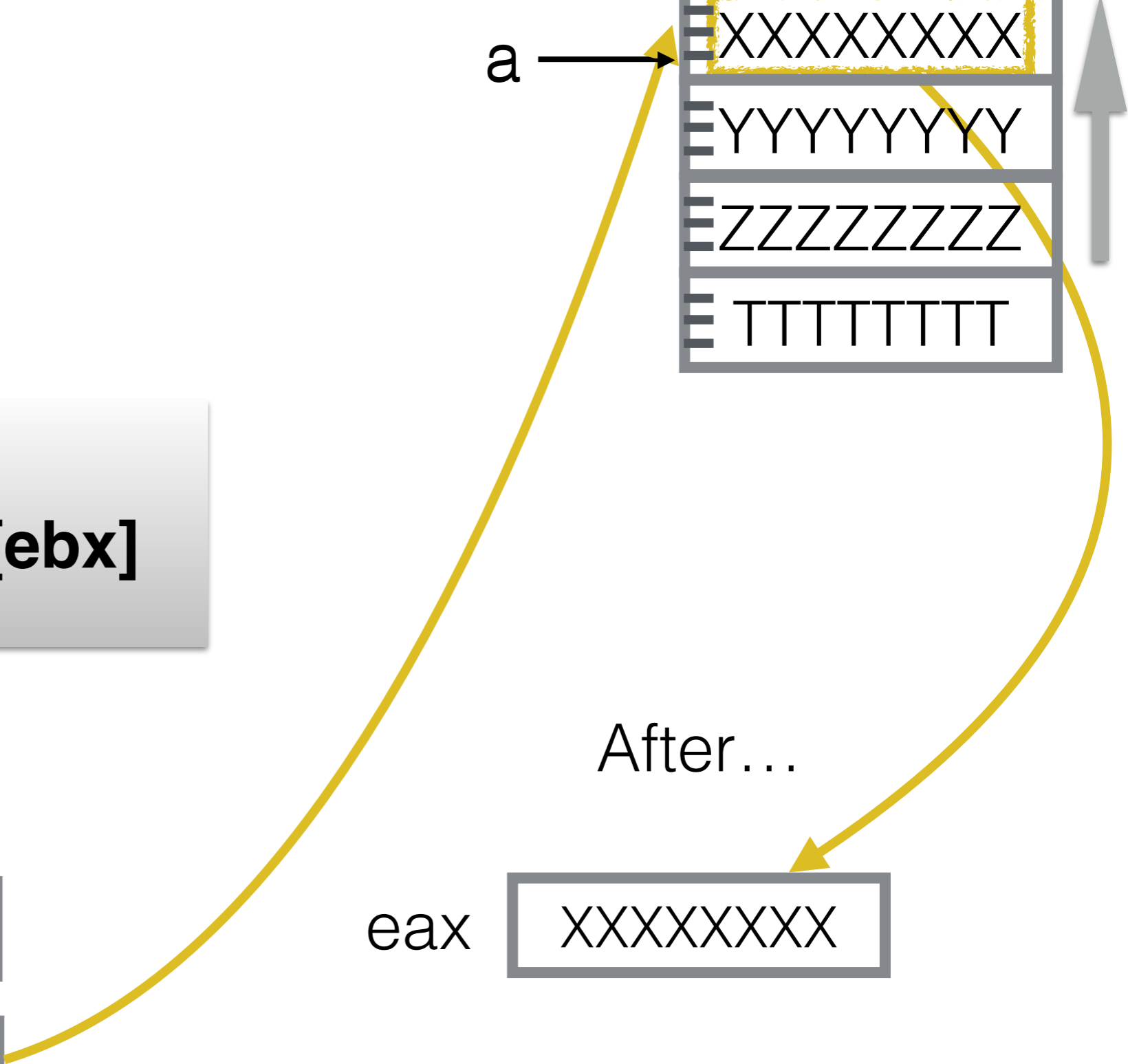


```
mov ebx, a  
mov eax, dword[ebx]
```

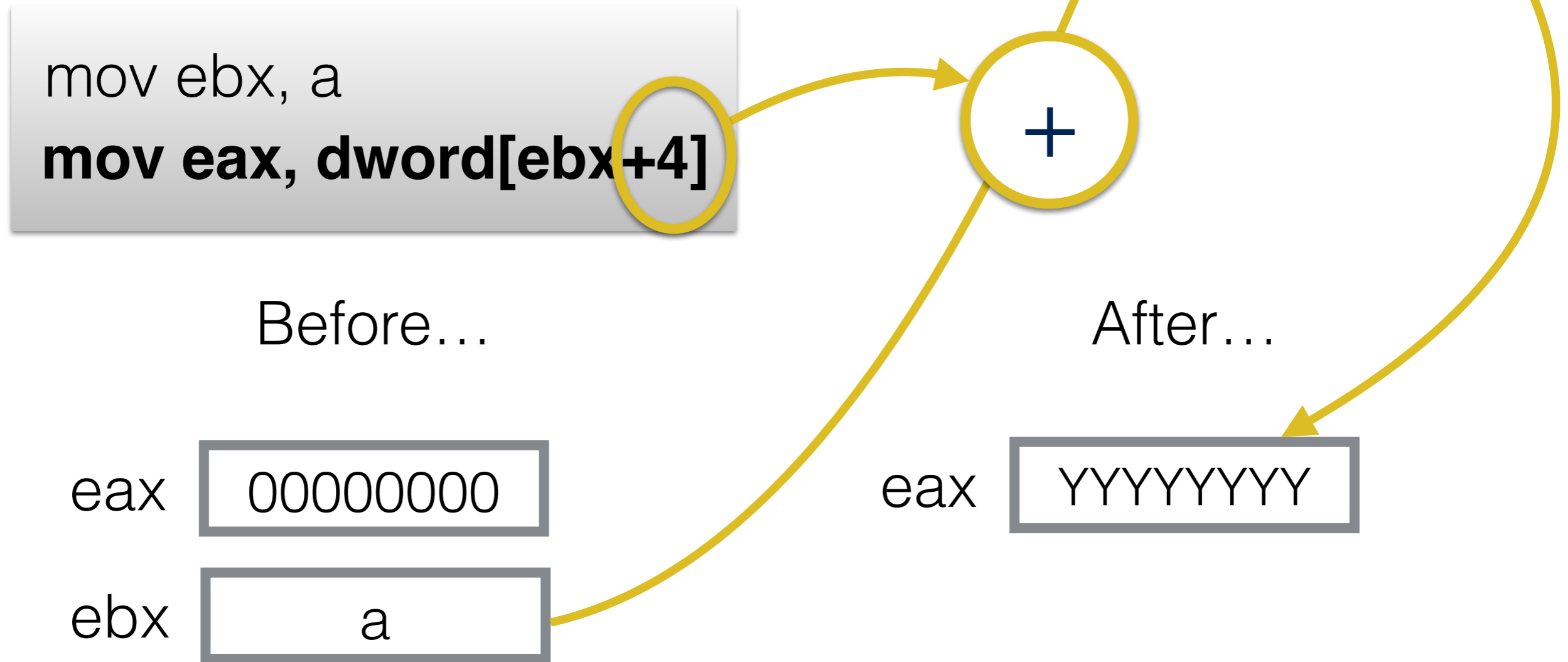
Before...



After...



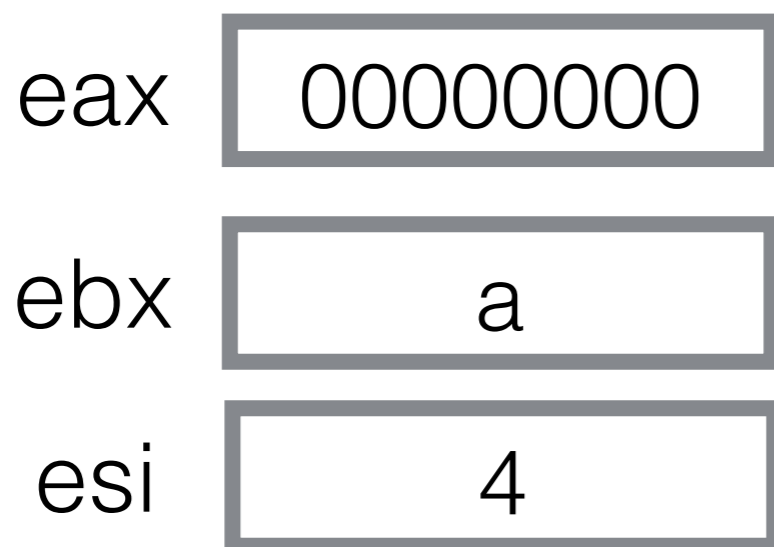
Indirect plus Dispt.



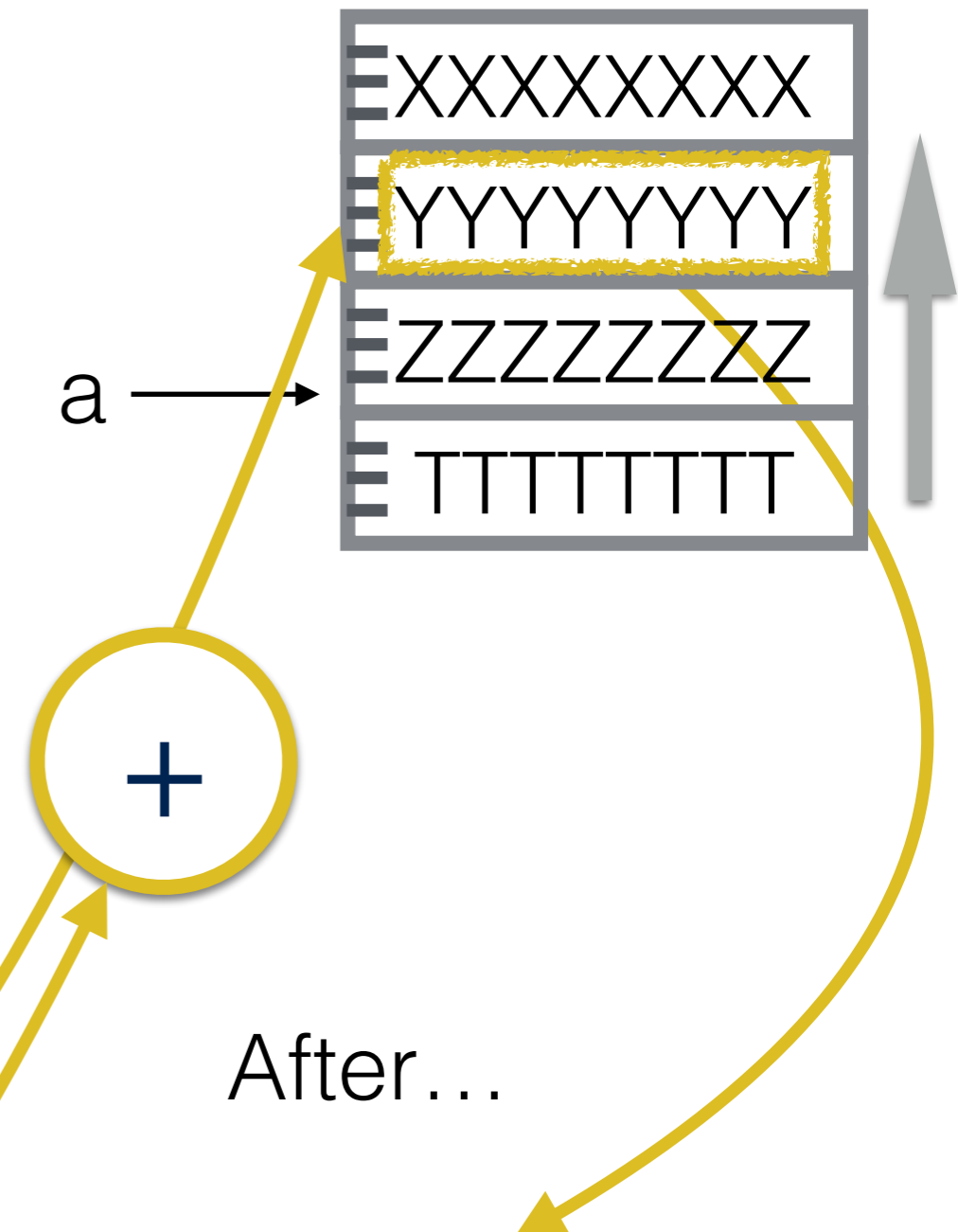
Indirect Indexed

```
mov ebx, a  
mov esi, 4  
mov eax, dword[ebx+esi]
```

Before...

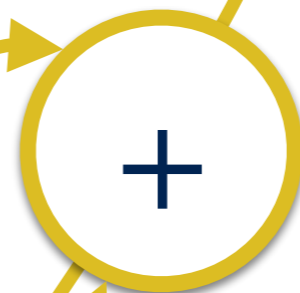
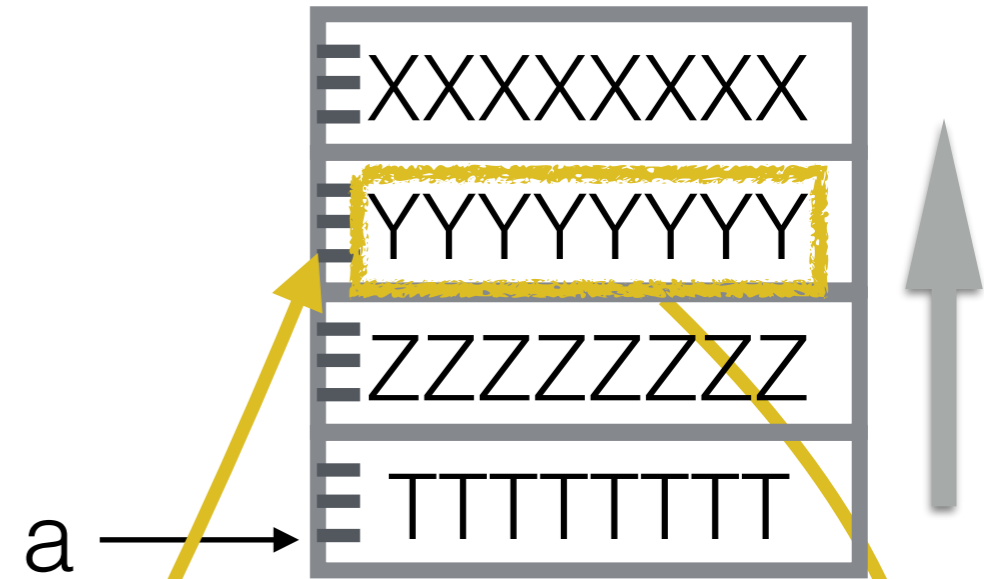


After...

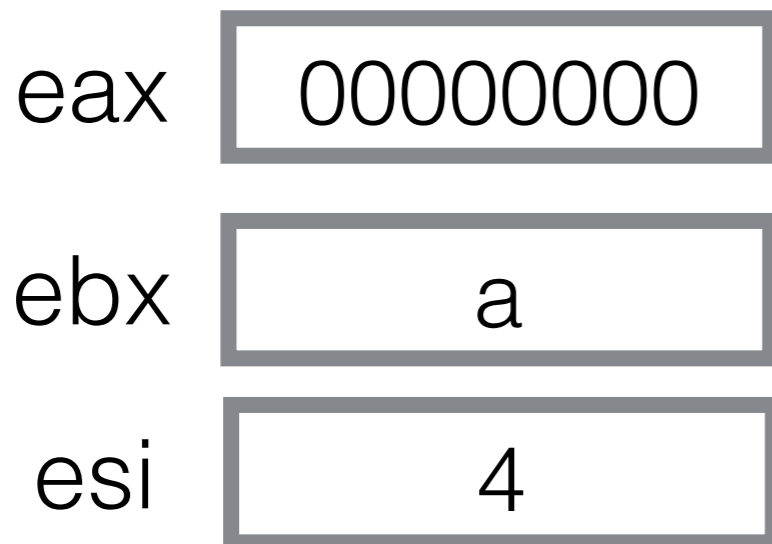


Indirect Indexed + Dispt.

```
mov ebx, a  
mov esi, 4  
mov eax, dword[ebx+esi+4]
```



Before...



After...

