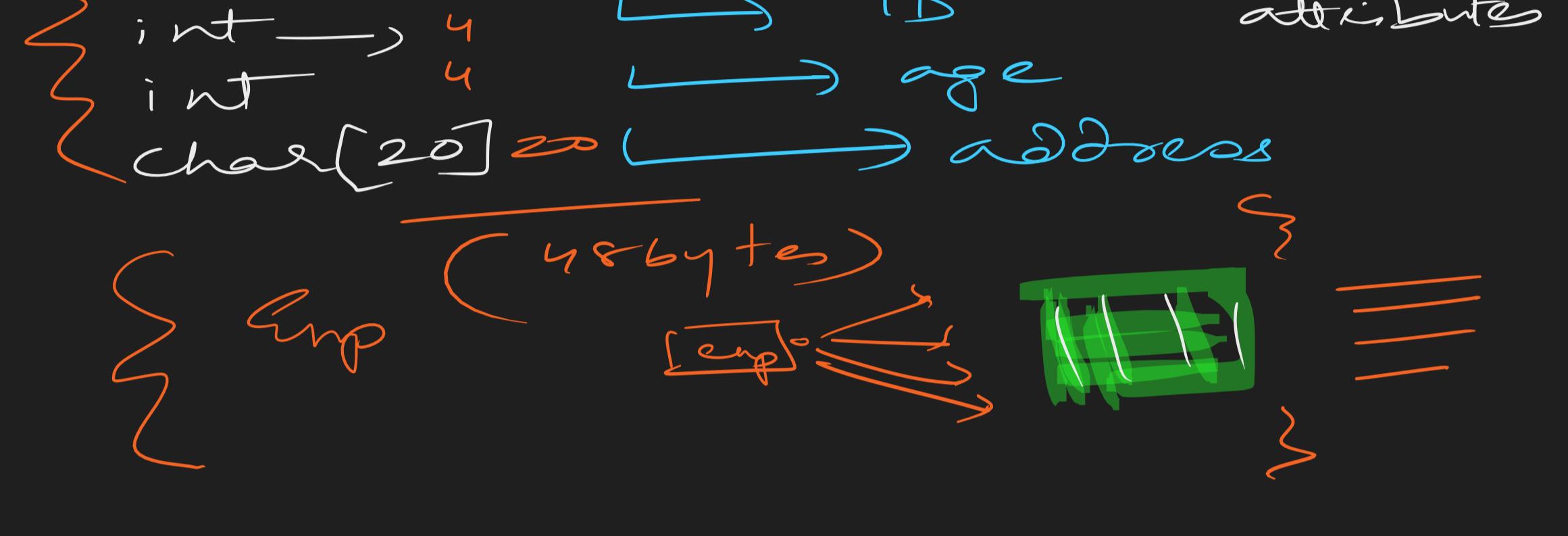


```

str = {Kushaal from Mahankal}
      ^ i
      |
while (str[i] != '\0') {
    if (str[i] == '.') {
        words++;
    }
    i++;
}

```



Structures	↳	Unions
User-defined data types:		
struct Employee {		union Employee {
char name[20];		char name[20]
int age;		int age;
int empID;		int empID;
char email[20];		char email[20];
}	};	};

Struct	Union
Size = $20 + 20 + 4 + 4$	Size = 20
Size = $\sum \text{all vars}$	Size = size of (largest)
$V_1 = M_1$	$V_1 \rightarrow [M]$
$V_2 = M_2$	$V_2 \rightarrow [M]$
$V_3 = M_3$	$V_3 \rightarrow [M]$ one value

Student → struct is union (Separate files)

→ name ← 20
 → age ← 4
 → branch ← 20
 → USN ← 20 [PC26CS096]
 → email ← 20

Struct Union

struct { Online Store }

(Make it memory efficient)

Items → book, shirt

shirt

char brand[20];
 char size[10];
 char color[10];

int price;
 char type[20],
 casual / formal

has title[20]
 has author[20]
 has genre[10]

int price;
 char type[20],
 ebook, hardcover