Struct in deep

Declaration of structs

1) Struct Student {
        char name[50];
        double gPa;
    }

    int main() {
        Struct Student student1;

2) typedef Struct {
        int x;
        int y;
    } Point;

    int main() {

        Point Point1;   شكرا للمشاهدة

So ~~Typedef~~.

used to create an alies data type, making
complex types easier to read and use.

struct{

    unsigned int a:3;
    unsigned int b:5;

$a \rightarrow 3$ bit

$$2^3 \rightarrow 8 \text{ values}$$

$b \rightarrow 5$ bit ...... 0 - 31

$$2^5 = \boxed{32}$$

If we put $a = 10;$ 2

10 $\boxed{1010} \rightarrow \boxed{010}$

لأن لا هذه القيمة تحتاج
لأن الرقم هذليل علي خانات

Enum & Union:

```
enum Colors{
    ReD, GreeN, Blue}
    " ReD=0/ GreeN=1/ Blue=2
```

→ size is the sum of the largest member

UnioN → All members share the same memory

Struct → All members have a separate space

Union

كتحجز عند لواتاها جد متغير واحد

لبس وحده كل متجمه