

After WS8

1) ~~#define MAX(a,b,c) { (a>b)?(a>c)?a:(c>b)?c:b; }~~

2) define

#TO_LOWER(a) { if (a >='A' & a <='Z')? a - 'A'; : a; }

3) define

#OFFSET(s,f) { size_t return sizeof(s) + (type*)0 + sizeof(s.f); }

4) a. $\text{sizeof}(s) = \text{bytes } 16$ int num = $\text{ptr} \& 4$
 char ch1 = $\text{ptr} \& 3$
 int* ptr = $\text{ptr} \& 3$
 char ch2 = $\text{ptr} \& 3$

b. ~~relative address~~ ~~relative offset~~ ~~offset is s relative~~
~~struct -> pointer~~

5) struct \rightarrow struct as S1

6) struct \rightarrow struct as S1

7) $\text{sizeof}(u1) = \text{padding} \text{ ptr } 160 / \text{ptr } 10$

8) $\text{ptr } 160$ \rightarrow padding -> $\text{ptr } 160$ \rightarrow 1 \rightarrow $\text{ptr } 160$
 \rightarrow padding -> $\text{ptr } 160$ \rightarrow $\text{ptr } 4$ \rightarrow $\text{ptr } 4$ \rightarrow $\text{ptr } 4$ \rightarrow $\text{ptr } 4$
 \rightarrow padding -> $\text{ptr } 160$ \rightarrow $\text{ptr } 128$ \rightarrow $\text{ptr } 8$