Custom realloc

Understanding the Correction :
- The function main is not complete : the yellow zone is a heap area pointed by another pointer in main()
- The green zone is the heap area pointed by my_ptr
- The custom realloc is the function in blue
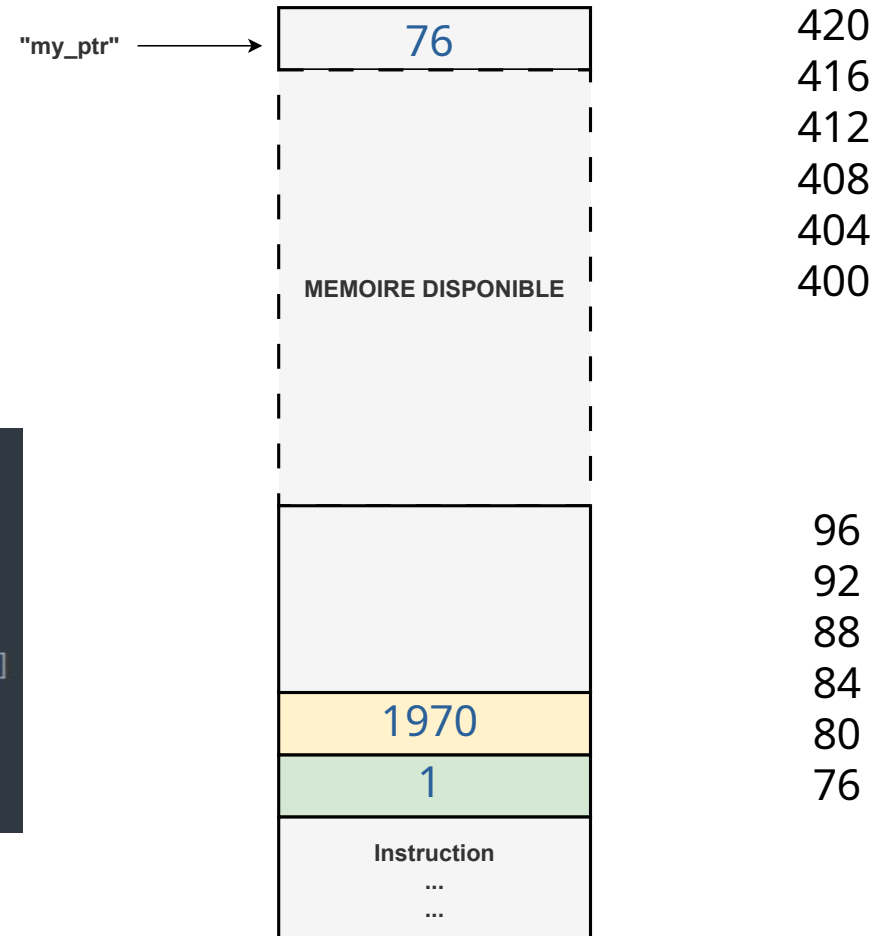- The system realloc is the function in red

Reminder :
- * before type T definition : "an address pointing to a T (or array of Ts)"
- * before a pointer variable P : "the value pointed by P"
- & before a variable V : "the address of V"
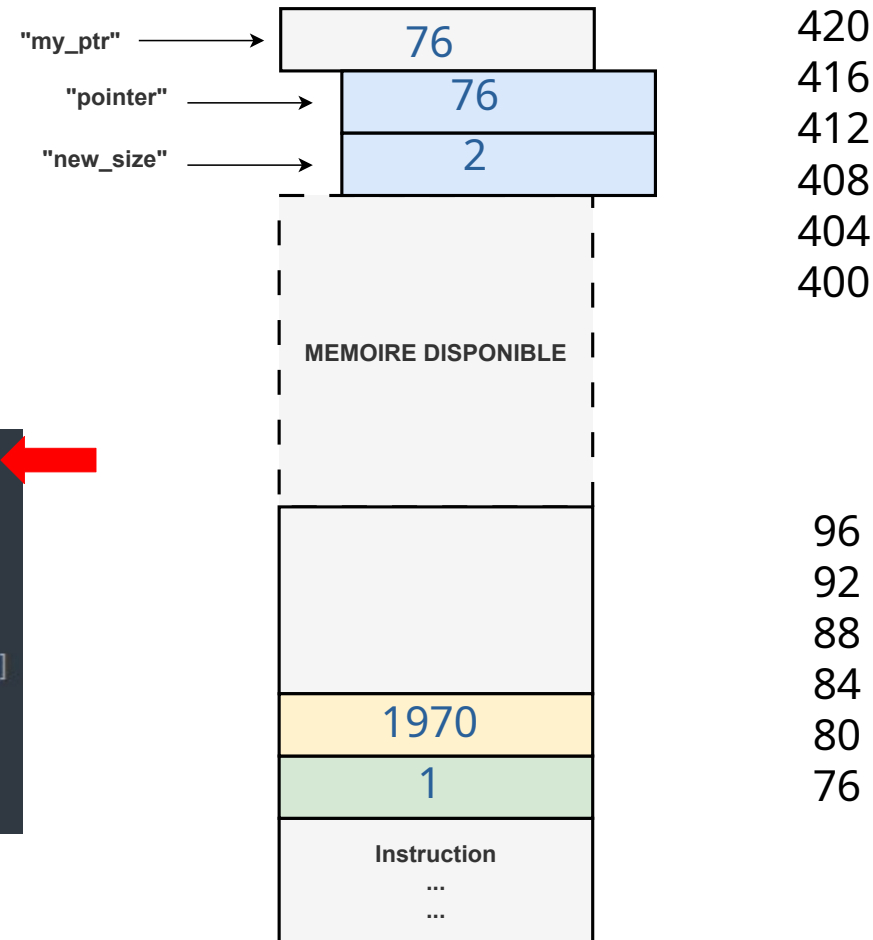
Faulty custom realloc

```
void realloc_dynamic_array(void *pointer, size_t new_size) {
    pointer = realloc(pointer, new_size);
    // Do some stuffs here
}

int main() {
    // my_ptr is an reference to a dynamic array containing [1]
    realloc_dynamic_array(my_ptr, 2);
    my_ptr[1] = 42; // aïe
    return 0;
}
```

"my_ptr" →

76	420
	416
	412
MEMOIRE DISPONIBLE	408
	404
	400
	96
	92
	88
	84
1970	80
1	76
Instruction	

Faulty custom realloc

"my_ptr" → `76`   420
"pointer" → `76`   416
    412
"new_size" → `2`   408
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MEMOIRE DISPONIBLE

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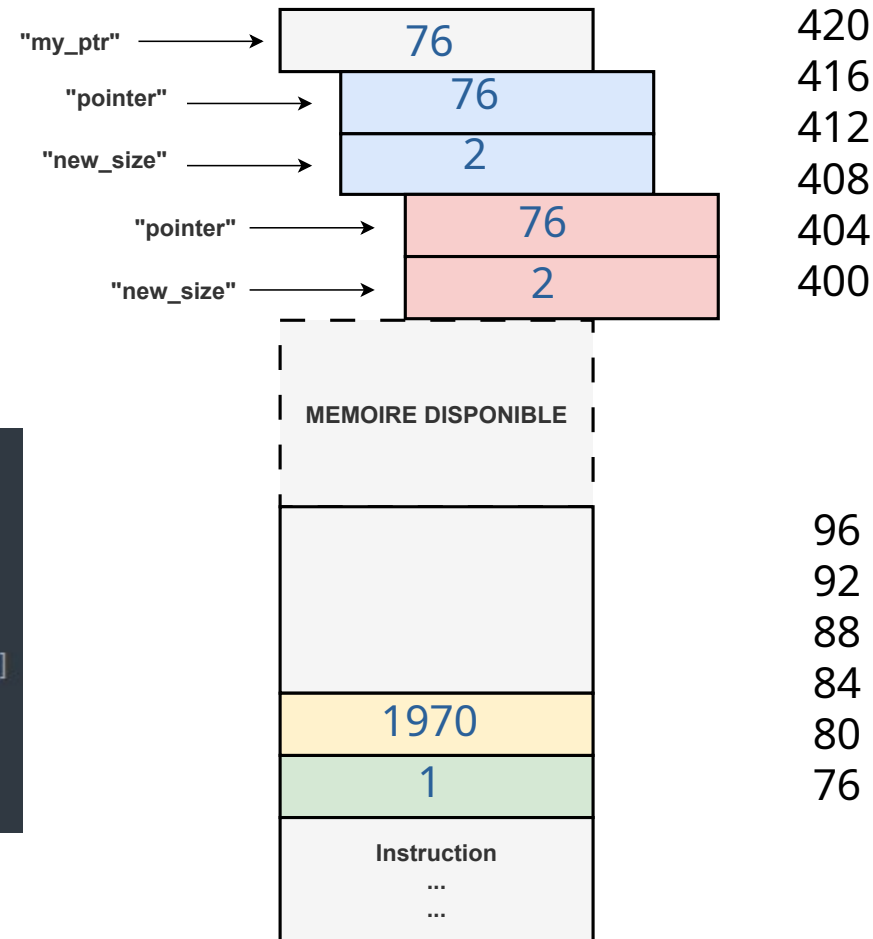
Faulty custom realloc

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                    — 408
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"new_size" ⟶ 2 — 400

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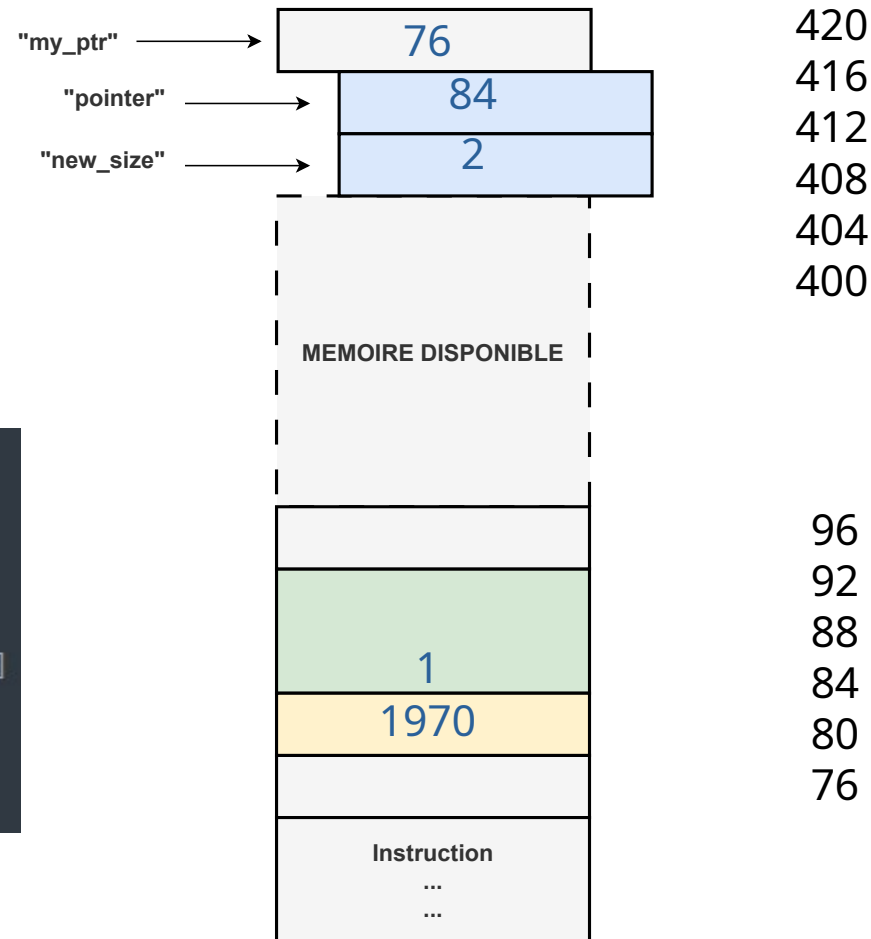1970 — 80
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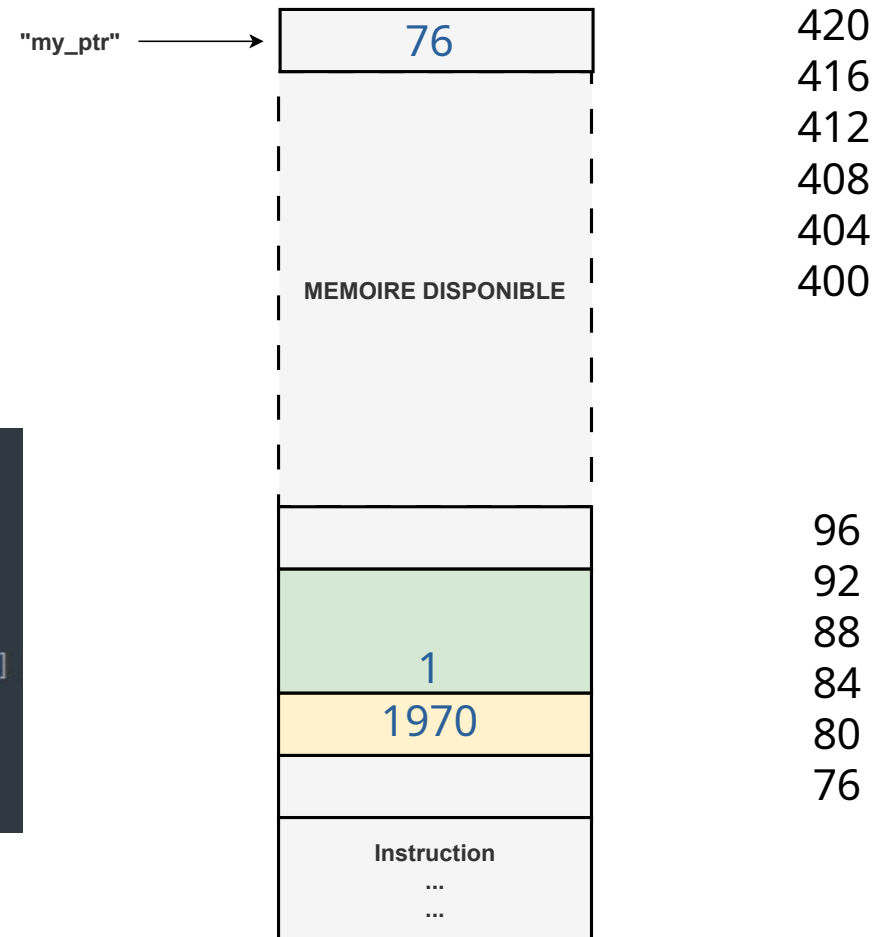1970 — 80
— 76

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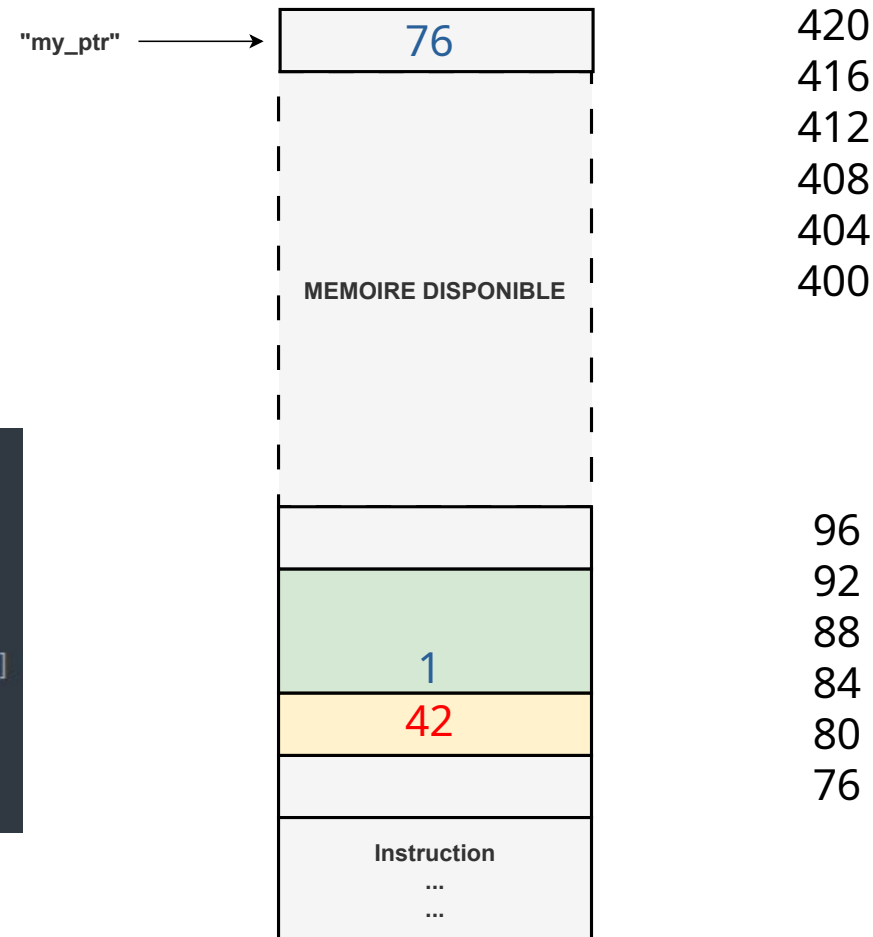1
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Correct custom realloc

```c
void realloc_dynamic_array(void **pointer, size_t new_size) {
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int main() {
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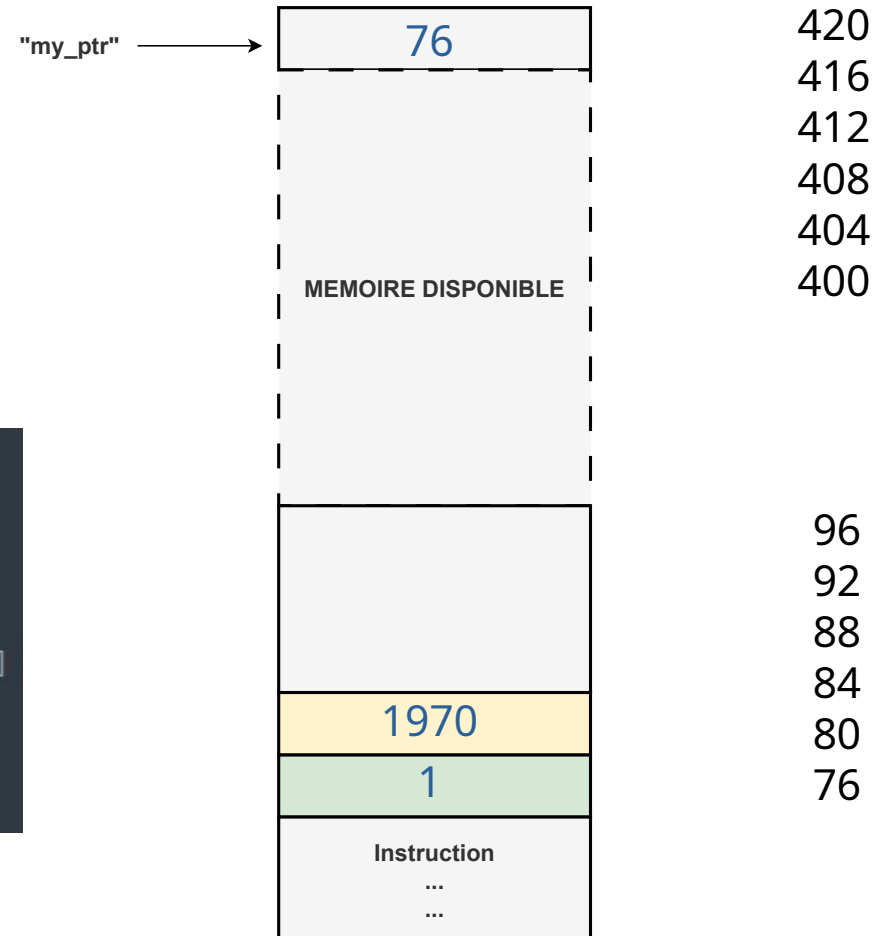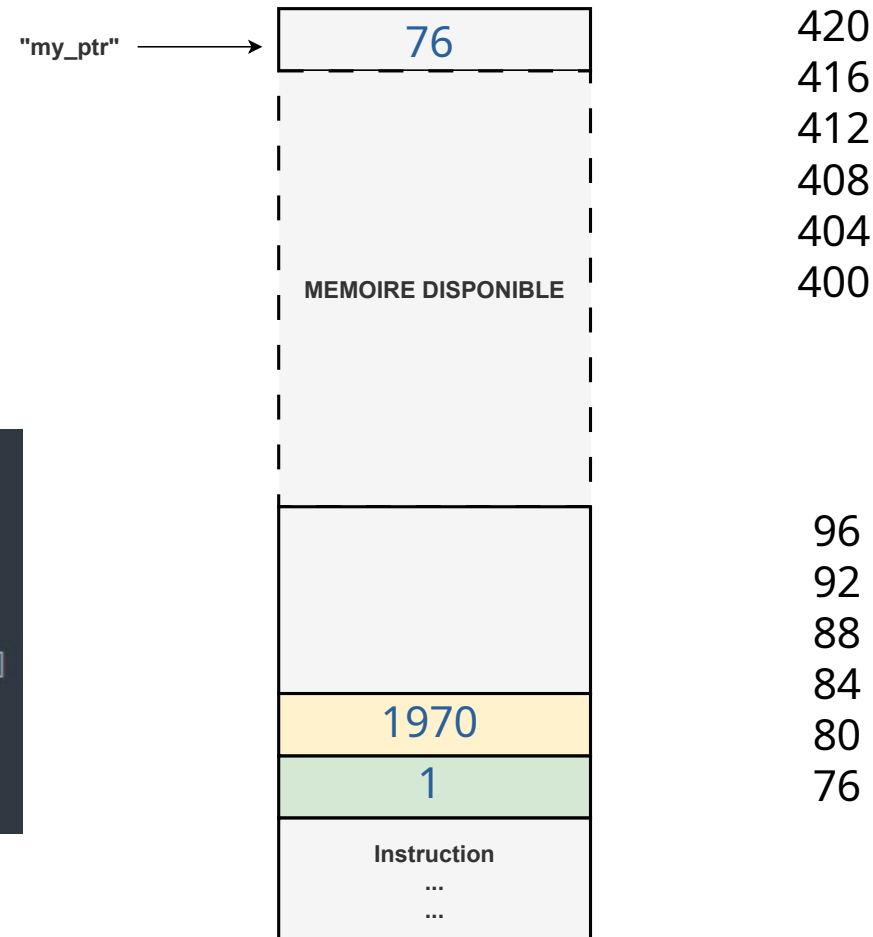# Correct custom realloc

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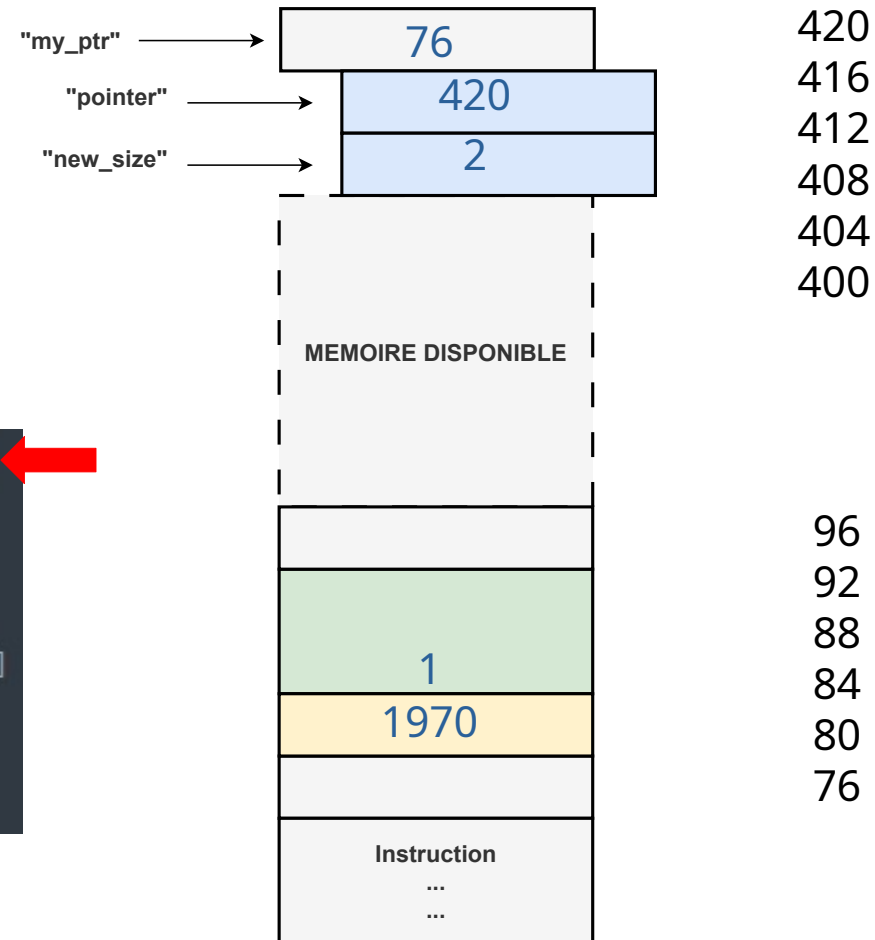| 404
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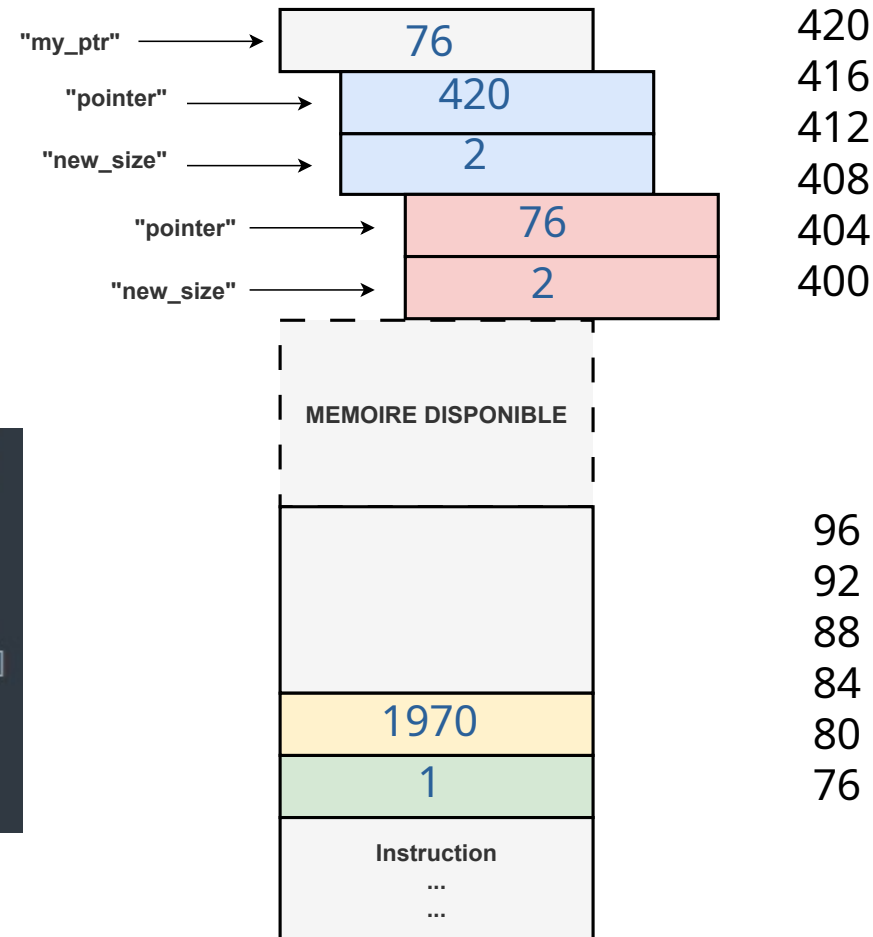
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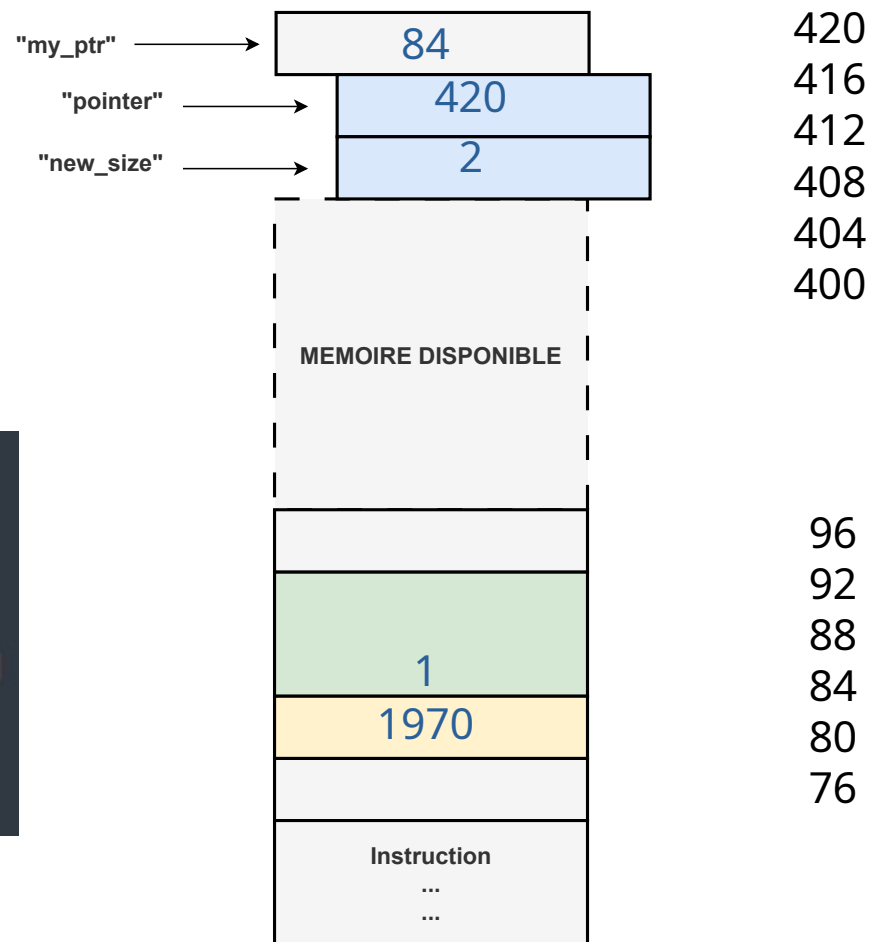1970 — 80
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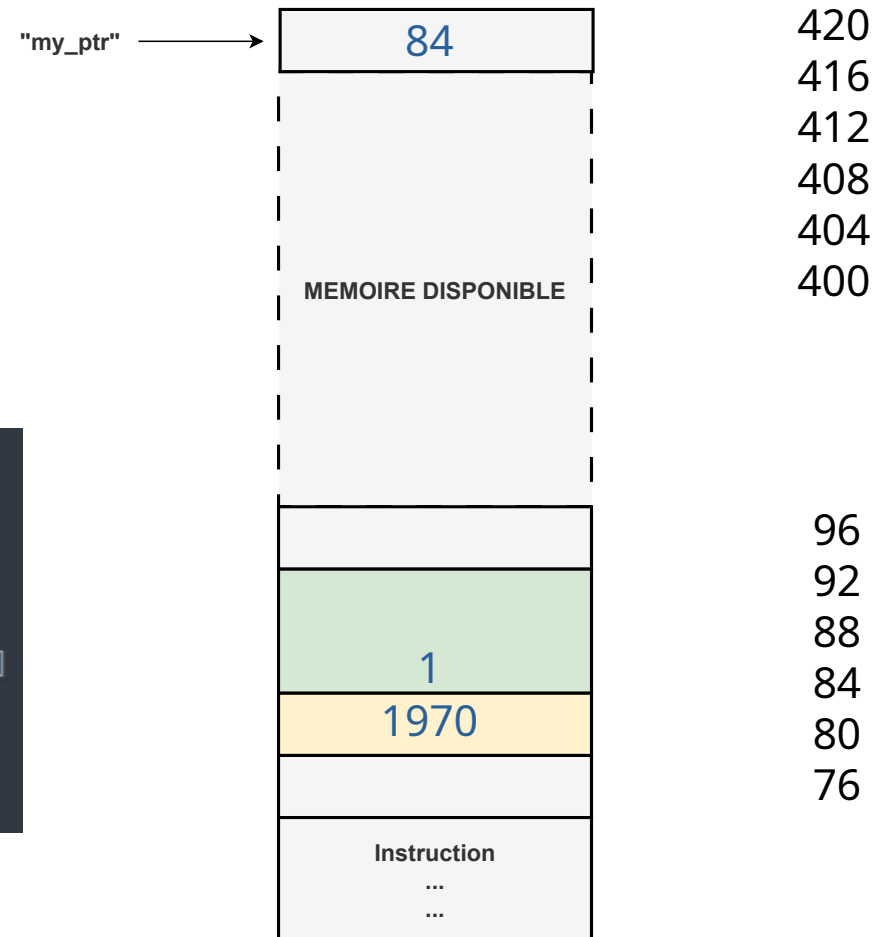
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