

About free()

- ① Use free() function to deallocate the memory in the same unit that you allocated them before.
- ② free() takes a pointer as a parameter, i.e. the start address of a piece of a memory!
- ③ it is a good practice to pair a free() call with a malloc() call or a calloc function call.
- ④ Do not free static array or the memory for ^a local variable.

For example:

```
int main() {  
    int a[10];  
    int num = 5;  
    (int*)  
    int *p = malloc(num * sizeof(int));  
    p[0] = 1;  
    p[1] = 3;  
    ...  
    free(p); // is ok, when what p points to is not useful anymore!  
    {  
        free(a); // Trouble; double free error  
        free(&num); // Trouble  
        free(&p); // Trouble  
    }  
}
```

paired