

## TP 1 - Partie 3 - Exercice 1 - I

```
1  #include <iostream>
2
3  #define SHOW(arg) std::cout << "Macro SHOW "" #arg "" : " << (arg) << '\n';
4
5  int main() {
6      int x{2};
7      int *p{&x};
8      int y{8};
9      int *q{&y};
10     std::cout << "The address of x - ", SHOW(&x);
11     std::cout << "The value of x - ", SHOW(x);
12     std::cout << "The value of p - ", SHOW(p);
13     std::cout << "The value of *p - ", SHOW(*p);
14     std::cout << "The address of y - ", SHOW(&y);
15     std::cout << "The value of y - ", SHOW(y);
16     std::cout << "The value of q - ", SHOW(q);
17     std::cout << "The value of *q - ", SHOW(*q);
18     std::cout << "The address of p - ", SHOW(&p);
19     std::cout << "The address of q - ", SHOW(&q);
20 }
```

## TP 1 - Partie 3 - Exercice 1 - II

### Possible output:

- 1 The address of x - Macro SHOW "&x": 0x7ffe8c87dcac
- 2 The value of x - Macro SHOW "x": 2
- 3 The value of p - Macro SHOW "p": 0x7ffe8c87dcac
- 4 The value of \*p - Macro SHOW "\*p": 2
- 5 The address of y - Macro SHOW "&y": 0x7ffe8c87dc9c
- 6 The value of y - Macro SHOW "y": 8
- 7 The value of q - Macro SHOW "q": 0x7ffe8c87dc9c
- 8 The value of \*q - Macro SHOW "\*q": 8
- 9 The address of p - Macro SHOW "&p": 0x7ffe8c87dca0
- 10 The address of q - Macro SHOW "&q": 0x7ffe8c87dc90