TP 1 - Partie 2 - Exercice 6 - I

```cpp
#include <cassert>
#include <cmath>
#include <iostream>

void print_square_roots(double a, double b, double c) {
  assert(a != 0);
  // Compute the discriminant.
  double const D{b * b - 4 * a * c};
  if (D < 0)
    std::cout << "Two distinct complex roots " << -b / (2 * a) << " + i "
              << std::sqrt(-D) / (2 * a) << " and " << -b / (2 * a)
              << " - i " << std::sqrt(-D) / (2 * a);
  else if (D == 0)
    std::cout << "Two equal real roots " << -b / (2 * a);
  else
    std::cout << "Two distinct real roots "
              << (-b + std::sqrt(D)) / (2 * a) << " and "
              << (-b - std::sqrt(D)) / (2 * a);
  std::cout << ".\n";
```

TP 1 - Partie 2 - Exercice 6 - II

```
20  }
21
22  int main() {
23    print_square_roots(1, 1, 1);
24    print_square_roots(1, 0, 0);
25    print_square_roots(1, 0, -1);
26  }
```

Output:

```
1  Two distinct complex roots -0.5 + i 0.866025 and -0.5 - i 0.866025.
2  Two equal real roots -0.
3  Two distinct real roots 1 and -1.
```