

cpp

```
#include <iostream>
```

```
int main() {  
    int p = 40;  
    int q = 17;  
  
    std::cout << ( p & q ) << std::endl;  
    std::cout << ( p | q ) << std::endl;  
    std::cout << ( p ^ q ) << std::endl;  
    std::cout << !p << std::endl;  
    std::cout << !( p & q ) << std::endl;  
    std::cout << !( p | q ) << std::endl;  
    std::cout << ( p << 3 ) << std::endl;  
    std::cout << ( p >> 3 ) << std::endl;  
  
    return 0;  
}
```

0
57
57
0
1
0
320
5

cpp

```
#include <iostream>
```

```
int main() {  
  
    std::cout << false << std::endl;  
    std::cout << !false << std::endl;  
  
    auto b = true;  
    std::cout << b << std::endl;  
    std::cout << !b << std::endl;  
  
    return 0;  
}
```

```
0
1
1
0
```

cpp

```
#include <ios>
#include <iostream>

int main() {

    std::cout << true << std::endl;
    std::cout << false << std::endl;

    std::cout << std::boolalpha;

    std::cout << true << std::endl;
    std::cout << false << std::endl;

    return 0;
}
```

```
1
0
true
false
```

cpp

```
#include <iostream>

#define MIN_UNITS 60
#define MIN_SEMESTERS 5

int main () {
    int completed_units, completed_semesters;

    std::cout << "How many units have you completed?" << std::endl;
    // std::cin >> completed_units;
    completed_units = 60;

    std::cout << "How many semesters have you completed?" << std::endl;
```

```

        // std::cin >> completed_semesters;
        completed_semesters = 5;

        if (completed_units >= MIN_UNITS || completed_semesters >= MIN_SEMESTERS)
            std::cout << "You have earned your associates degree!" << std::endl;

        return 0;
    }

```

How many units have you completed?
 How many semesters have you completed?
 You have earned your associates degree!

cpp

```

#include <iostream>

#define MIN_AGE 21
#define MIN_YEARS_DRIVING 5

int main () {
    int current_age, years_driving;

    std::cout << "How old are you?" << std::endl;
    // std::cin >> current_age;
    current_age = 21;

    std::cout << "How many years have you been driving?" << std::endl;
    // std::cin >> years_driving;
    years_driving = 5;

    if (current_age >= MIN_AGE && years_driving >= MIN_YEARS_DRIVING)
        std::cout << "You meet the requirements for a loan." << std::endl;

    return 0;
}

```

How old are you?
 How many years have you been driving?
 You meet the requirements for a loan.