Day 12/180 Operator in C++

1: Temperature Range: Write a program that checks if a given temperature is suitable for swimming. If the temperature is between 70 and 90 (Excluded) degrees Fahrenheit print yes, else NO.
Solution:

```cpp
#include <iostream>
using namespace std;

int main() {
    double temperature;

    // Get the temperature input from the user
    cout << "Enter the temperature in degrees Fahrenheit: ";
    cin >> temperature;

    // Check if the temperature is between 70 and 90 (excluded)
    if (temperature > 70 && temperature < 90) {
        cout << "Yes, it's suitable for swimming!" << endl;
    } else {
        cout << "No, it's not suitable for swimming." << endl;
    }

    return 0;
}
```

2: Even and Positive Number: Write a program that prints “YES” if a given number is both even and positive, otherwise it will print “NO”.

Solution:

```cpp
#include <iostream>
using namespace std;

int main() {
    int number;

    // Get the number input from the user
    cout << "Enter a number: ";
    cin >> number;

    // Check if the number is both even and positive
    if (number > 0 && number % 2 == 0) {
        cout << "YES" << endl;
    } else {
        cout << "NO" << endl;
    }

    return 0;
}
```

3: Age Check: Implement a program that checks if a person is a teenager. A teenager is someone whose age is between 13 and 19 (inclusive).

Solution:

```cpp
#include <iostream>
using namespace std;

int main() {
    int age;

    // Get the age input from the user
    cout << "Enter your age: ";
    cin >> age;

    // Check if the age is between 13 and 19 (inclusive)
    if (age >= 13 && age <= 19) {
        cout << "You are a teenager." << endl;
    } else {
        cout << "You are not a teenager." << endl;
    }

    return 0;
}
```

4: Take three numbers a,b,c from the user, print yes if a is either greater than b or c. Otherwise print NO.

Solution:

```cpp
#include <iostream>
using namespace std;

int main() {
    int a, b, c;

    // Get input for three numbers
    cout << "Enter the first number (a): ";
    cin >> a;
    cout << "Enter the second number (b): ";
    cin >> b;
    cout << "Enter the third number (c): ";
    cin >> c;

    // Check if 'a' is greater than 'b' or 'c'
    if (a > b || a > c) {
        cout << "YES" << endl;
    } else {
        cout << "NO" << endl;
    }

    return 0;
}
```

5: What will be the result below according to the precedence table.

- 2*3-48==5/4*6

```
=> 6 - 48 == 6
=> -42 == 6 => (false) => 0
```

- 6<<2-4*8/2

```
=> 6 << 2 - 16 => 6 << -14 => This is a left shift operation,
and shifting left by a negative value is undefined behavior
```

- 5>4<3/2-8%4+5

```
=> 5 > 4 < 1 - 0 + 5 => 5 > 4 < 6 => 1 < 6 => 1 (true)
```

- 14-8+92>>2+70

```
=> 98 >> 72 => 0
```