Conditional Statements
(Assignment Questions)

Question 1 : Write a C++ program to get a number from the user and print whether it's positive, negative or zero.

Question 2 : Write a C++ program that takes a year from the user and print whether that year is a leap year or not.
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Hint : *A leap year is exactly divisible by 4 except for century years (years ending with 00). The century year is a leap year only if it is perfectly divisible by 400.*

      Eg :   1999 is not a leap year

                  2000 is a leap year

                  2004 is a leap year

Question 3 : What will be the value of x & y in the following program:

```cpp
int main() {
   int a = 63, b = 36;
   bool x = (a < b) ? true : false;
   int y = (a > b) ? a : b;
   cout << x << "," << y << endl;
   return 0;
}
```

Question 4 : What'll be the output of the program:

```cpp
int main() {
   int a = 5;

   if (++a*5 <= 25) {
       cout<<"Hello\n";
   } else {
       cout<<"Bye\n";
   }
```

```
    return 0;
}
```

Question 5 : For any 3 digit number check whether it's an Armstrong number or not.

Armstrong number is a number that is equal to the sum of cubes of its digits.

Eg : 371 is an armstrong number.

3*3*3 + 7*7*7 + 1*1*1 = 371

Bonus : Read up about the difference between typedef (keyword), macros & const (keyword) in C++.