

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.

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:

```
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;
}</pre>
```

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

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

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

return 0;

Question 5: For any 3 digit number check whether it's an Armstrong number or not. <u>Armstrong number</u> 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++.

