//Ethan Chiu Day of Year

#include <iostream>

#include <string>

#include <array>

using namespace std;

class DayOfYear

{

private:

int day;

public:

static const string monthName[];

static const int monthDays[];

static string date;

DayOfYear(int userDay)

{

day = userDay;

}

DayOfYear()

{

}

static string translate(int userDay)

{

int month;

int dayshere;

for(int i = 0; i < 12; i++)

{

dayshere = userDay - monthDays[i];

if(dayshere <= 0)

{

month = i;

dayshere = userDay;

break;

}

userDay -= monthDays[i];

}

return (monthName[month] + " " + to\_string(dayshere));

}

void print(string date)

{

cout << date << endl;

}

};

const string DayOfYear::monthName[ ] = {"January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December" };

const int DayOfYear::monthDays[ ] = {31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31 };

int main()

{

int day = 1000000;

string date;

DayOfYear temp;

cout << "Input number between 1-365: ";

cin >> day;

cin.ignore(1000,10);

while(day != 0 && day >= 1 && day <= 365)

{

date = temp.translate(day);

temp.print(date);

temp = DayOfYear(day);

cout << "Input number between 1-365: ";

cin >> day;

cin.ignore(1000,10);

}

}