```java
//Manoj Vasa
public class isLeapYear {
    public static class LeapYearException
    extends Exception  { }
public static class NotLeapYearException
    extends Exception  { }

static void checkLeapYear(String year)
    throws LeapYearException, NotLeapYearException,
         NumberFormatException {

    long yearAsLong = Long.parseLong(year);

//
// a leap year is a multiple of 4, unless it is
// a multiple of 100, unless it is a multiple of
// 400.
//
// We calculate the three values, then make a
// 3-bit binary value out of them and look it up
// in results
//

final boolean results [] =
           { true, false, false, true,
             false, false, false, false };

    if (results [
        ((((
                yearAsLong % 4) == 0) ? 1 : 0) << 2) +
        ((((
                yearAsLong % 100) == 0) ? 1 : 0) << 1) +
        ((((
                yearAsLong % 400) == 0)? 1 : 0) << 0)]){

        throw new LeapYearException();}

    else{
        throw new NotLeapYearException();}
}


public static void main (String[] args) {

    if (args.length > 0) {
        try{
            checkLeapYear(args[0]);}

        catch ( NumberFormatException nfe ){
            System.out.println("Invalid argument: " + nfe.getMessage());}

        catch ( LeapYearException lye ){
            System.out.println(args[0] + "is a leap year");}

        catch ( NotLeapYearException nlye ) {
            System.out.println(args[0] + "is not a leap year");}
        }
```

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58     }
59 }
60
```