

```

/* SELF ASSESSMENT
1. Did I use appropriate CONSTANTS instead of numbers within the code?
    Mark out of 5: 5
    Comment: I used constants for all unchanging values.
2. Did I use easy-to-understand, meaningful CONSTANT names?
    Mark out of 5: 5
    Comment: All constant names make sense.
3. Did I format the CONSTANT names properly (in UPPERCASE)?
    Mark out of 5: 5
    Comment: All names were in UPPERCASE.
4. Did I use easy-to-understand meaningful variable names?
    Mark out of 10: 10
    Comment: All variable names are meaningful and make sense in the context of the question.
5. Did I format the variable names properly (in lowerCamelCase)?
    Mark out of 10: 10
    Comment: All variable names are in lowerCaseCamel.
6. Did I indent the code appropriately?
    Mark out of 10: 10
    Comment: All code indented appropriately.
7. Did I use an appropriate for loop to test all possibilities? There should be only one.
    Mark out of 20: 20
    Comment: I used a for loop and it tested all possibilities and there was only one answer.
8. Did I correctly check if people alive today were or could be alive in a year that is the square of their age in that year.
    Mark out of 30: 30
    Comment: I checked this possibility and made sure the answer represented this.
9. How well did I complete this self-assessment?
    Mark out of 5: 5
    Comment: The self-assessment was completed to an appropriate level.
Total Mark out of 100 (Add all the previous marks): 100
*/

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public class SquareAges {

    public static final int CURRENT_YEAR = 2018;
    public static final int MAX_AGE = 123;

    public static void main(String[] args) {

        for(int age = 0; age < MAX_AGE; age++)
        {
            int year = age * age;

            int maxRemainingYearsAlive = (MAX_AGE - age);

            int oldestPossibleYear = year + maxRemainingYearsAlive;

            int currentAge = age - (year - CURRENT_YEAR);

            if ((oldestPossibleYear >= CURRENT_YEAR) && (year - age <= CURRENT_YEAR)) {
                System.out.println("Someone of age " + currentAge + " during the year"
                    + " " + CURRENT_YEAR + " and lived when the square of "
                    + "the year was equal to the age as, " + "they"
                    + " were " + age + " during"
                    + " the year " + year + "");
            }
        }
    }
}

```