Scenario:

The local hospital allows outpatients to take a blood test and it wants to make a basic graphical display (histogram) to show how many patients took the test in various age groups in a day. You are required to write a program in C++ that achieves this. The program consists of the following three tasks:

Task1 The program should allow the hospital administrator to enter the age of each outpatient who visited the hospital for a blood test on a particular day (assuming that only one visit per day is allowed), until the administrator enters the age exceeding 109.

At this point the program should display a histogram using a star (*) sign. Each '*' represents the outpatient's age range as shown below.

You will find an example of the program output below. The example below shows the distribution of ages for 30 outpatients. Your program should work with any number of outpatients visiting the hospital in one day.

Example output:

```
0-19 *****

20-39 *******

40-69 *****
70-89 ***********

90-109 **
```

- As the administrator enters each 'age', a counter should count the number of ages which have been entered per patient.
  Use five groups for age range:
  `0-19,20-39,40-69,70-89,90-109`

- Make sure the display is neatly formatted as in the example above.

- Your program should make use of 'loops' for the display of each age group

After the histogram, a variety of statistics should be displayed such as: total number of outpatients visited in a day, total number of patients in a day who are below the age of 70, the highest and the lowest age of patients visited the hospital in a day.

Task2

According to task 1, the histogram shows each age group horizontally across the screen. Now change your solution to display the histogram vertically.
Copy your original solution, rename it and make changes to the new solution to display the histogram vertically. This means that the star sign (*) in an age group should go downwards and not across the screen.