Dæmatímaverkefni 2 – Lab 2

Þetta verkefni samanstendur af tveimur forritum. Í lausninni ykkar eigið þið eingöngu að nota aðferðir/efni sem fjallað er um í köflum 1 og 2 í kennslubókinni. / *This project consists of two programs. In your solutions, you should only use methods/material discussed in Chapters 1and 2 of the textbook.*

Program I

Skrifið C++ forrit *oddEven.cpp* sem les eina heiltölu `N` af lyklaborði. Fyrir sérhverja tölu á bilinu `N` niður í `1` skrifar forritið út hvort viðkomandi tala er oddatala eða slétt tala (ef `N < 1` þá skrifar forritið ekki neitt út). / *Write a C++ program named oddEven.cpp which reads a single integer* `N` *from the keyboard. For each number in the range* `N` *down to* `1` *the program writes out if the corresponding number is odd or even* (if `N < 1` the program does not output anything).

*Use a **while** loop in your solution.*

Example input/output:

```
Input n: 5
5 is odd
4 is even
3 is odd
2 is even
1 is odd
```

Forritið ykkar á að skrifa út nákvæmlega þennan texta ("5" er hér inntak) / *Your program should output the exact text shown above (here "5" is input).*

Program II

[Programming Project no. 14 in Chapter 2 in the textbook (slightly changed)]

Write a C++ program named grade.cpp that calculates the total grade for `N` *classroom exercises as a percentage. The user should input the value for* `N` *followed by each of the* `N` *scores and totals (scores and total should be double numbers). Calculate the overall percentage (sum of the total points earned divided by the total points possible) and output it as a percentage.*
If the user inputs a number `N` *less than* `1` *then an appropriate error message is written out (see below).*

Double numbers should be written out with two digits after the decimal point.

Use a ***do-while*** *loop in your solution.*

Example 1:

```
How many exercises to input: 0
Input at least one exercise!
```

Example 2:

```
How many exercises to input: 3

Score received for exercise 1: 10
Total points possible for exercise 1: 10

Score received for exercise 2: 7.5
Total points possible for exercise 2: 12

Score received for exercise 3: 5.7
Total points possible for exercise 3: 8

Your total is 23.20 out of 30.00, or 77.33%.
```

Your program should output the exact text shown above.