

# Assignment 4

**General Instructions:** Save all the files to a directory named "<group-number>\_as4", e.g. 23\_as4. Compress this directory to a zip file and submit it via Blackboard (on the same place where you have downloaded the assignment. Comment the code well in a clear manner and choose clear names for your variables and parameters. The assignment must be presented Tuesday, 8/12. The deadline for turning in the assignment is 7/12 at 23:59:59.

**The program must read the questions, possible answer alternatives and right answers from files. The group is free to split and organize the files as they wish. THE ZIP SUBMISSION MUST CONTAIN ALL THE FILES USED BY THE PROGRAM. Ready made text files for this assignment are available, if the group chooses to use them THEY MUST ALSO BE SUBMITTED IN THE ZIP. The organization of the provided text files can be seen at the end of this document.**

## 1 postkodmiljonaren.py

Write a program where a contestant can play a version of "Who Wants to Be a Millionaire?". The game consists of 15 multiple choice questions, each one with 4 possible answers for the user to choose. Every time the contestant answers a question correctly, the contestant moves one step up in the payout table. If the participant answers the million-SEK question correctly, the game ends and the participant wins the top prize of 1 million SEK and is declared a millionaire. If the contestant wrongly answers a question, the right answer is revealed, the game ends and the contestant walks away with the money value of the most recently cleared guaranteed level. Thus, if the contestant loses before reaching the first guaranteed level (10,000 SEK), the contestant will get nothing. If the contestant decides not to answer the question, the game ends and the contestant walks away with the money value of the most recently cleared level and is asked to pick an answer to find out the correct answer to the question.

Table 1 shows the prizes at each level. Levels 5 and 10 are guaranteed levels, if the constant gets a question wrong after passing these levels, he will leave the contest with the money value signaled.

Question Number	Question Prize
1	1000
2	2000
3	3000
4	5000
5	10000(*)
6	20000
7	30000
8	50000
9	75000
10	100000(*)
11	150000
12	225000
13	350000
14	500000
15	1000000

Table 1: Prize values for each question

Your program should present the user with questions and their alternatives until the user wins or gets a question wrong. If the user gives the wrong answer, the program should tell the user what the right answer was, and how much money he will walk away with (if he did not reach a guaranteed level the program should tell him he will walk away empty handed).

Figures 1, 2, and 3 present some examples of how your program could look like, the group is free to style the program differently.

```

Question 1 for 1000
How many strings does an electric guitar have?
1 One
2 Two
3 Six
4 Five
==>
Sorry, that is the wrong answer, you will go home empty handed.
The right answer was Six

```

Figure 1: Getting a question wrong before a guaranteed level

```
Question 6 for 20000
What does tempo mean in music?
1 Length
2 Speed
3 Volume
4 Sound
==>
Right answer!

Question 7 for 30000
What does Dynamics mean?
1 Silence
2 Speed
3 Length
4 Loud and quiet
==>
Sorry, that is the wrong answer, you get to take 10000 home.
The right answer was Loud and quiet
```

Figure 2: One right answers and a wrong answer after a guaranteed level

```
Question 14 for 500000
What musical interval known to western tonalities was commonly referred to as "Diablo en musica"
1 Unison
2 Tritone
3 Major Third
4 Idon Exist
==>
Right answer!

Question 15 for 1000000
What's the third mode of the Harmonic minor scale?
1 Ionian #5
2 Dorian #4
3 Lydian #2
4 Superlocrian
==>
YOU WON!!!! YOU'RE A MILLIONAIRE!!!!!!!!!!!!
```

Figure 3: Winning the game

## Organization of Provided Files

Four files are provided together with the assignment. One with the questions, another with the possible choices for the questions, another with the number for the right answer, and another with the prize money for each questions.

The questions file contains a question per line, with a total of 15 lines, thus 15 questions. The prize file follows the same organization, with each line being the prize for the respective question.

The choices file contains the multiple choices for each question, the organization here is as follows. Each four lines of the file contain fours choices for a question, that is, lines 1-4 contains the choices for the first question, lines 5-8

the choices for the second question, 9-12 the choices for the third question. This pattern repeats for a total of 60 lines (15 question with 4 choices each).

Finally, the answer file contains the number of the right answer for each question at each line. So, if the line contains 1, this means the right answer is the first from the group of 4 possible answers, 2 meaning its the second, 3 the third and 4 the forth.

**The group does not need to use the provided files, you may use whatever file organization and content you see fit.**