Dear colleagues,

Here are the general instructions for Auto Multiple Choice programme. It creates quiz and exam sheets that could be graded in an automated manner. The examples will be given in the following text.

## Instructions:

- 1. Simple question with only one correct answer should start with 'qqq' (see the example 2 and 3 below), and be combined in the same file. The best would be to name this file Qs.txt
- 2. Multi correct answer questions should start with triple 'qmq', and be placed in a separate file (example 1). Best naming is Qms.txt. Please note, that maximum point for these questions by default will be the number of correct answers (example 1 will be scored 2 and every error will deduct 1 point from maximum). Please, indicate the total maximum point for the question as 'qm#' where # refers to a maximum scoring for this question
- 3. If you need answers for particular questions to be placed horizontally, declare them as 'qhq' or 'qh#' where # refers to a number of columns the answers will be aligned against (example 5). Place these questions in a separate file, best called Qhs.txt
- 4. If you need open answer questions, start them with 'qoLM' where L is a number of lines (each line is a separate answer), and M is the maximum point students get for this question (example 6, as you can see there will be 3 lines and total maximum mark is 4 points) Place in a separate file named Qos.txt. Please note, that you will have checkboxes for partially correct student answers. The number of partially correct answers will be calculated from the following formula:

$$Score_{Partial} = \frac{M_{maximal\ score}}{N_{lines} + 1}$$

In this case for a question from the example with only three lines for answer and maximum 3 points, you will have following checkboxes:



This feature is supposed to give you some flexibility in marking open questions

- 5. All correct answers should start with "+++" (example 1, 2 and 3)
- 6. All wrong answers start with '---'(example 1, 2 and 3)
- 7. There shouldn't be any spaces placed between **qqq**, **qmq**, +++ or --- and the following text (example 1, 2 and 3)
- 8. If you have some blank space in the form of "\_\_\_\_\_\_" in the text to be filled, write ULINEDSPACE (it can be written anywhere in the text, not only the beginning of the line) (example 3)
- 9. Send the attendance sheet with Student Names and Student ID Numbers in an Excel file (extension .xls or .xlsx could be downloaded from Registrar) along with other files
- 10. Please note that all new lines of text that do not start with either **qqq**, **qmq**, **qhq**, +++ or --- will be omitted in the final printed version of the test (example 1, answer **Fifty Shades of Grey** will be omitted)
- 11. If you indicate both preceding answers in another answer, please repeat them instead of writing their letters/number (example 4)

Ex1. qmqWhat is the best movie in the world? (If you declare this question with 'qm4' each correct answer will score 2 points while each error will deduct 1 point)
+++InterstellarHarry Potter +++AlitaSaw Fifty Shades of Grey Ex2. qqqWhat is the best animated film?
+++FrozenBarbiMasha and the Bear Ex3. qqqFor discovering and describing induced pluripotent stem cells <b>ULINEDSPACE</b> became a Nobel Prize winner in 2012:
Matthew McConaugheyJennifer Doudna +++Shinya Yamanaka Ex4. qqqNobel Prize winner(s) in 2012:
John GurdonJennifer DoudnaShinya YamanakaShinya YamanakaShinya Yamanaka and John Gurdon (don't write A AND C)Jennifer Doudna and Shinya Yamanaka (don't write B AND C) Ex5. qh4Climate change is an undoubtful fact? (you could also declare them with 'qhq', with 5 columns being a default layout)
+++True False

If you have concerns on how the tests are processed you can find the repository with the Python script on <a href="https://github.com/mirakklys/python\_for\_AMC">https://github.com/mirakklys/python\_for\_AMC</a>

Ex6.

qo34Name three transneptunian objects:

This is a Python3 code and you will need to install it on your computer before running. As an output of the script you will obtain a LaTeX file ready to insert into Auto-Multiple Choice programme on Linux (main repo: <a href="https://gitlab.com/jojo\_boulix/auto-multiple-choice/">https://gitlab.com/jojo\_boulix/auto-multiple-choice/</a>)