**Individual HW: Math Quiz Program**

The following program runs a math quiz consisting of 10 multiplication problems involving operands between 1 and 10:

**import random**

**correct = 0**

**for i in range(10):**

**num1 = random.randint(1, 10)**

**num2 = random.randint(1, 10)**

**prod = num1 \* num2**

**ans = int(raw\_input("What is " + str(num1) + " times " + str(num2) + "? "))**

**if ans == prod:**

**print "That's right -- well done.\n"**

**correct += 1**

**else:**

**print "No, I'm afraid the answer is ", prod, "\n"**

**print "\nI asked you 10 questions. You got ", correct, " of them right."**

**print "Well done!"**

Your mission will be to do the following:

1. (15 points) Modify the program so that the user can choose how many questions they will be asked. Don’t allow them to choose 0 or a negative number.

2. (25 points) Add levels to the program:

o Beginner - with operands between 1 and 10

o Intermediate - with operands between 1 and 25

o Advanced - with operands between 1 and 50

o The user should choose the level when starting a quiz.

3. (20 points) Modify the message at the end so that it says:

o *Well done!* if the user answered more than 3/4 of the questions correctly.

o *You need more practice* if they get between 1/2 and 3/4 of the questions correct.

o *Please ask your math teacher for help!* if they get less than 1/2 of the questions correct.

(Round up if in doubt – the user needs to answer 5 questions to get ¾ of 6 correct)

4. (15 points) Allow the user to start another quiz without restarting the program.

5. (25 points) Let the user choose the question type: addition, subtraction, multiplication, or mixed (randomly choose for each question).

**Submission**

Upload your program (.py) to Oncourse under Assignments -> Assignment 1 (Individual) as a ***.py file***. Name your file as ***YourUsername\_A1\_indiv.py***

e.g. If I were to upload, it would be johfdunc\_A1\_indiv.py

Include the following information as a comment at the top of the file you submit:

 Your name

 Your group number

Test your code on a wide range of inputs!