Python Programming
Lesson 7.1
Multiple Choices Quiz

Presented by Advaspire Team

Building a Multiple Choices Quiz

Last we did build something like a quiz of sort, but the player need to guess the answer. This time we will provide them some answer to choose from.
We will implement some functions like loops, if statement and classes in this quiz.

```
question_prompts = [
    "What color are apples? \n (a) Red/Green \n(b) Purple \n (c) Orange\n\n",
    "What color are bananas? \n (a) Teal \n(b) Magenta \n (c) Yellow\n\n",
    "What color are strawberries? \n (a) Yellow \n(b) Red \n (c) Blue\n\n"
]
```

In a quiz, you usually have a question prompt which consist of the question itself and the answer. Both of these elements need to be keep track of.
So we need to create a question class which we can store the question prompt and answers.

```
class Question:
    def __init__(self,prompt,answer):
        self.prompt=prompt
        self.answer=answer
```

Create a new file called Question. Inside, create the class for Question. Then follow like example. The prompt and answer will be the element we need in a Question.

At the start of the main file with the questions, type in from Question import Question so we can use the Question function. The following code will be inside the main file.

Now we need to create another array. Inside we need create the object question. Follow the example. The index and string will be the question and answer. So question 1 will be [0] with “a” as answer.

```
questions = [
    Question(question_prompts[0],"a")
    Question(question_prompts[1],"c")
    Question(question_prompts[2],"b")
]
```

Now that we have the questions, its time to create the function that will ask the question. In the same file, we are going to define a function. It will be part of a loop, as I want to get the user answers and check if its right or not. Go down a bit to start.

```
def run_test(questions):
    score = 0
    for question in questions:
        answer = input(question.prompt)
        if answer == question.answer:
            score +=1
```

Call the function as run_test with with questions as list. Then set the score to 0. It will increase by 1 for each correct answer. Next will be the for loop.

For loop

```
def run_test(questions):
    score = 0
    for question in questions:
        answer = input(question.prompt)
        if answer == question.answer:
            score +=1
```

Type in for question in questions : This mean for each question object inside the questions array, I want to do something.
The answer variable needs to have the input with question function and prompt. This is so that it can save the user answer and check it in the next block of code.

Next, we need to check for the answer and if its correct, increase the score by 1. Type in the if codes like the example. This part will check if the answer is equal to the answer elements stored in the 2nd array.

Display Results

```
def run_test(questions):
    score = 0
    for question in questions:
        answer = input(question.prompt)
        if answer == question.answer:
            score +=1
    print ("You got " + str(score)+ '/' + str (len(questions)) + ' correct')

run_test(questions)
```

Now that we have finished the quiz component, lets find out how to display the results of the quiz. We will show how many you got right out of the overall questions.

Outside of the for loop, type in the print code. Inside you will see some str functions. This is because The score and number of questions are interpreted as integer. Then at the end and outside of the entire loop, type in run_test (questions) to try your quiz.

You can direct message your teacher and ask your question through Slack Robotene Community or arrange a One-to-One Consultation with your teacher.

Any Questions?

Thank you :)