3 Ejaz is creating a program that will allow the user to create quizzes. He is using object-oriented programming (OOP).

There are two classes: `QuestionClass` and `QuizClass`.

The class attributes and methods are in the following tables. All attributes are declared as private.

QuestionClass	
`Question : STRING`	`// stores the question`
`Answer : STRING`	`// stores the correct answer`
`Difficulty : INTEGER`	`// stores the difficulty as an integer` `// from 0(easy) to 10(hard)`

`Constructor(QuestionP, AnswerP, DifficultyP)`	`// creates an instance of QuestionClass`
	`// sets the attributes to the parameter`
	`// values`

`GetQuestion()`	`// returns the question // returns the difficulty level`
`GetDifficulty()`	
`GetAnswer()`	`// returns the answer`

QuizClass	
`Questions : ARRAY[0:19] OF QuestionClass`	`// stores maximum 20 questions of` `// type QuestionClass`
`NumberOfQuestions : INTEGER`	`// stores the number of questions` `// in this quiz`

Constructor()	// creates an instance of
	// QuizClass
	// initialises NumberOfQuestions
	// to 0

AddQuestion()	// adds the parameter question to
	// the array
	// increments NumberOfQuestions

GetQuestion()	// returns the next question to be // asked
CheckAnswer()	// takes an answer as a parameter // and returns TRUE if correct

(a) Write **program code** to define the class `QuizClass`. You are only required to write code for the attribute declarations and constructor.

If you are writing in Python, include attribute declarations using comments.

Use your programming language's constructor method.

```
class QuizClass:

    def __init__(self):
        self.NumberOfQuestions = 0
        self.Questions = [QuestionClass(None,None,None) for _ in range(20)]
```

(b) The `QuizClass` method `AddQuestion()` takes a question object as a parameter and stores it in the next available location in the array `Questions`. It returns `TRUE` if it is successfully stored, and `FALSE` otherwise.

Write **program code** for the method `AddQuestion()`.

```
    def AddQuestion(self,question):
        if self.NumberOfQuestions < 20:
            self.Questions[self.NumberOfQuestions] = question
            self.NumberOfQuestions += 1
            return True
        else:
            return False
```

(c) The first quiz is created with the identifier `FirstQuiz`.

The first question in this quiz is: "What is 100 / 5 ?".

The answer is “20” and the difficulty level is 1.

Write **program code** to:

- declare an instance of `QuizClass` with the identifier `FirstQuiz`
- declare an instance of `QuestionClass` with the identifier `Question1`
- add `Question1` to the array in `FirstQuiz` using `AddQuestion()`.

```
FirstQuiz = QuizClass()
Question1 = QuestionClass("What is 100/5?","20",1)
FirstQuiz.AddQuestion(Question1)
```