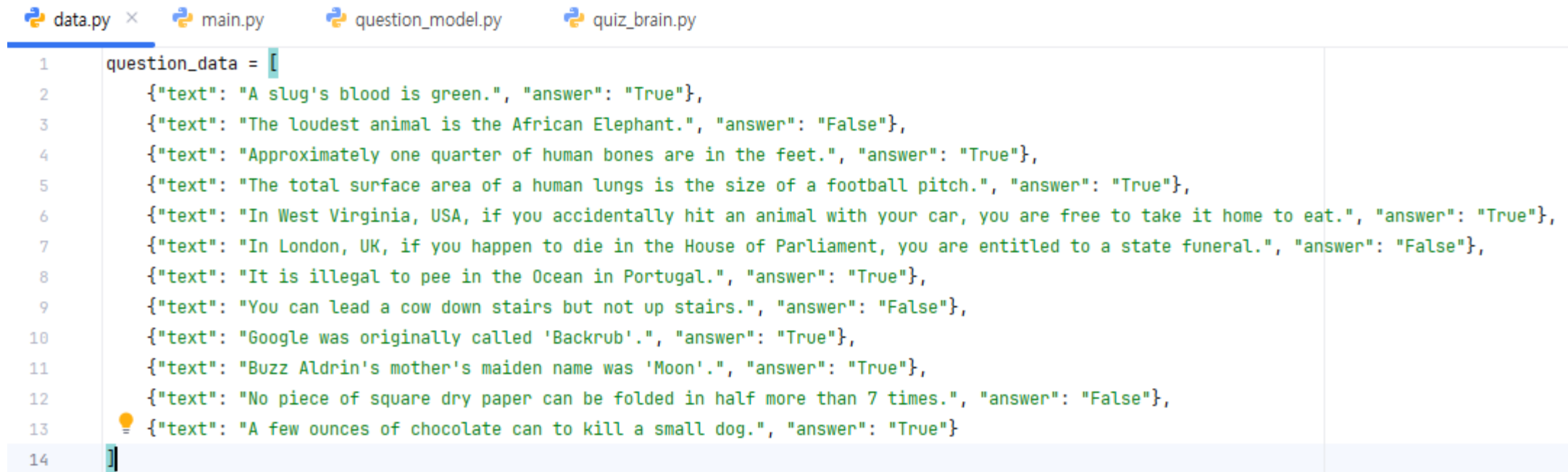


3. Quiz_Game using OOP Requirements

개발 요구사항 (Requirements)

1. data.py는 다음과 같이 질문과 답을 리스트와 딕셔너리로 갖고 있음.



```
1 question_data = [  
2     {"text": "A slug's blood is green.", "answer": "True"},  
3     {"text": "The loudest animal is the African Elephant.", "answer": "False"},  
4     {"text": "Approximately one quarter of human bones are in the feet.", "answer": "True"},  
5     {"text": "The total surface area of a human lungs is the size of a football pitch.", "answer": "True"},  
6     {"text": "In West Virginia, USA, if you accidentally hit an animal with your car, you are free to take it home to eat.", "answer": "True"},  
7     {"text": "In London, UK, if you happen to die in the House of Parliament, you are entitled to a state funeral.", "answer": "False"},  
8     {"text": "It is illegal to pee in the Ocean in Portugal.", "answer": "True"},  
9     {"text": "You can lead a cow down stairs but not up stairs.", "answer": "False"},  
10    {"text": "Google was originally called 'Backrub'.", "answer": "True"},  
11    {"text": "Buzz Aldrin's mother's maiden name was 'Moon'.", "answer": "True"},  
12    {"text": "No piece of square dry paper can be folded in half more than 7 times.", "answer": "False"},  
13    {"text": "A few ounces of chocolate can to kill a small dog.", "answer": "True"},  
14 ]
```

개발 요구사항 (Requirements)

2. 퀴즈 12개와 답은 다음과 같이 콘솔에 보임

- 응시자는 퀴즈에 대한 답을 true or false로 응답함
- 화면에는 현재 점수를 보여줌

```
C:\Users\user\AppData\Local\Programs\Python\Python311\python.exe "G:\myEdu\6. Bigdata\1. Python\Python-100\Day17\quiz-game-start\main.py"
```

```
Q.1: A slug's blood is green. (True/False) :true
```

```
You got it right!
```

```
The correct answer was : True
```

```
Your current score is : 1 /1
```

```
Q.2: The loudest animal is the African Elephant. (True/False) :false
```

```
You got it right!
```

```
The correct answer was : False
```

```
Your current score is : 2 /2
```

```
Q.3: Approximately one quarter of human bones are in the feet. (True/False) :true
```

```
You got it right!
```

```
The correct answer was : True
```

```
Your current score is : 3 /3
```

```
Q.4: The total surface area of a human lungs is the size of a football pitch. (True/False) :true
```

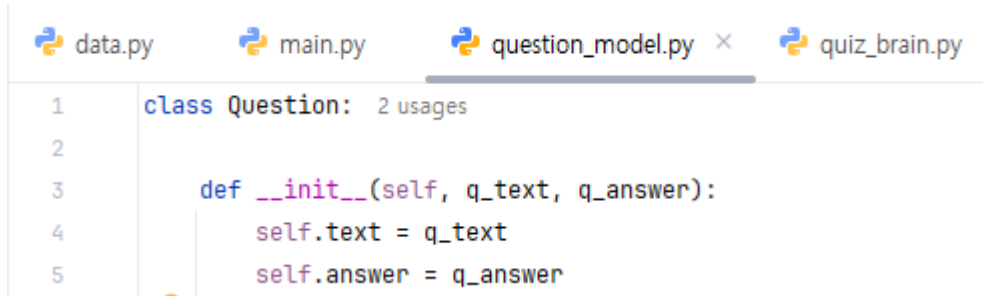
```
You got it right!
```

```
The correct answer was : True
```

```
Your current score is : 4 /4
```

개발 요구사항 (Requirements)

3. 질문과 관련된 class Question은 다음과 같다.

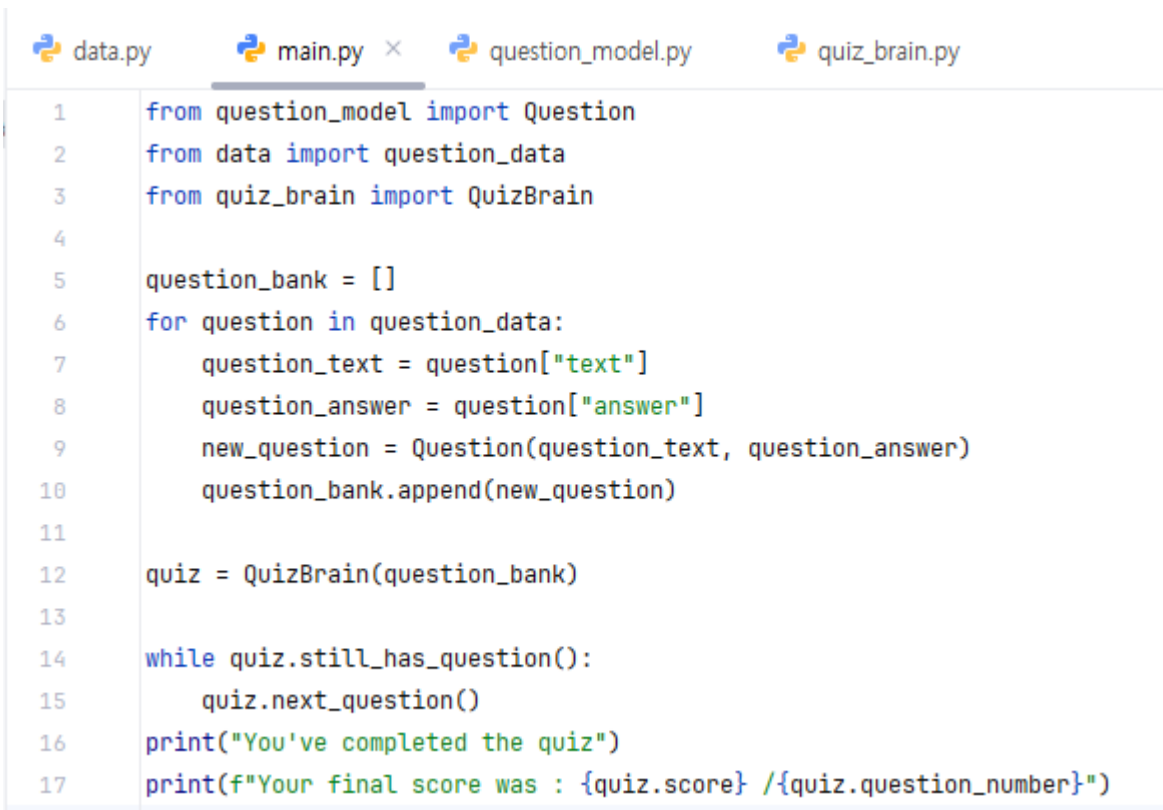


The screenshot shows a code editor with four tabs: data.py, main.py, question_model.py (active), and quiz_brain.py. The active tab displays the following Python code:

```
1 class Question: 2 usages
2
3     def __init__(self, q_text, q_answer):
4         self.text = q_text
5         self.answer = q_answer
```

개발 요구사항 (Requirements)

4. main.py는 다음과 같은 기능을 수행함.



```
1 from question_model import Question
2 from data import question_data
3 from quiz_brain import QuizBrain
4
5 question_bank = []
6 for question in question_data:
7     question_text = question["text"]
8     question_answer = question["answer"]
9     new_question = Question(question_text, question_answer)
10    question_bank.append(new_question)
11
12    quiz = QuizBrain(question_bank)
13
14    while quiz.still_has_question():
15        quiz.next_question()
16    print("You've completed the quiz")
17    print(f"Your final score was : {quiz.score} / {quiz.question_number}")
```

개발 요구사항 (Requirements)

5. quiz_brain.py에서 class QuizBrain이 수행해야 할 기능을 프로그래밍하세요.

- 1) Constructor에는 question_number와 score를 초기화하고, q_list를 매개변수로 받아서 question_list에 넘겨준다.
- 2) still_has_question() 메소드는 질문을 계속할 수 있는지를 체크하는 메소드임
- 3) next_question() 메소드는 현재 질문을 저장하고, question_number를 이용하여 해당 질문이 콘솔에 보이고 사용자의 True/False 정보를 저장함. 여기에서 답을 체크하는 check_answer()를 호출한다.
- 4) check_answer() 메소드에서는 사용자의 답이 맞으면 score를 1점 올리고, "You got it right"를 출력함 틀리면 " That's wrong" 을 출력한다.
다음 출력문은 "The correct answer was : true or false " 출력하고
다음 출력문에는 "Your current score is : 10/12 "와 같이 줄력이 되도록 한다.