Explanation

1. **ask_question() Function**: This function takes a question, the correct answer, and optionally a list of answer choices. It displays the question and options, gets the user's response, and checks if it's correct.

2. **quiz() Function**: This function contains a list of questions, answers, and options. It loops through each question, calls the ask_question() function to get the user's answer, and keeps track of the score.

3. **Questions and Answers**: The questions are stored in a list of dictionaries. Each dictionary contains the question text, the correct answer, and a list of possible answer choices.

4. **Score**: At the end of the quiz, the user's score is displayed.

INPUT

```python
# Function to ask questions and check answers

def ask_question(question, answer, options=None):

    print(question)

    if options:

        for i, option in enumerate(options, 1):

            print(f"{i}. {option}")

    user_answer = input("Your answer: ").strip().lower()

    return user_answer == answer.lower()


# Main quiz function

def quiz():

    score = 0


    # List of questions, answers, and options (if needed)

    questions = [
```

```json
    {
        "question": "What is the capital of France?",
        "answer": "paris",
        "options": ["Berlin", "Madrid", "Paris", "Rome"]
    },
    {
        "question": "Who wrote 'Romeo and Juliet'?",
        "answer": "shakespeare",
        "options": ["Dickens", "Shakespeare", "Hemingway", "Austen"]
    },
    {
        "question": "What is the chemical symbol for water?",
        "answer": "h2o",
        "options": ["CO2", "O2", "H2O", "N2"]
```

```python
        },
        {
            "question": "Which planet is known as the Red Planet?",
            "answer": "mars",
            "options": ["Earth", "Mars", "Jupiter", "Saturn"]
        },
        {
            "question": "How many continents are there?",
            "answer": "7",
            "options": ["5", "6", "7", "8"]
        }
    ]

    # Loop through each question
    for q in questions:
        question = q['question']
```

```python
        answer = q['answer']
        options = q['options']

        if ask_question(question, answer, options):
            print("Correct!\n")
            score += 1
        else:
            print(f"Wrong! The correct answer was: {answer}\n")

    # Final score
    print(f"Your final score is {score}/{len(questions)}")


# Start the quiz
if __name__ == "__main__":
    print("Welcome to the Quiz!\n")
    quiz()
```

OUTPUT

Welcome to the Quiz!

What is the capital of France?

1. Berlin

2. Madrid

3. Paris

4. Rome

Your answer: paris

Correct!

Who wrote 'Romeo and Juliet'?

1. Dickens

2. Shakespeare

3. Hemingway

4. Austen

Your answer: shakespeare

What is the chemical symbol for water?

1. CO2

2. O2

3. H2O

4. N2

Your answer: h2o

Correct!

Which planet is known as the Red Planet?

1. Earth

2. Mars

3. Jupiter

4. Saturn

Your answer: mars

Correct!

PROJECT REPORT

GENERAL KNOWLEDGE QUIZ

INTRODUCTON TO ARTIFICAL

INTELLIGENCE

MOHAMED ARFAAZ KHAN F(123011019018)

MOHAMED JAHIDH J (123012019019)

RAJARISHI M(123012019025)

SOWBARNIKA SANKARALINGAM(123011019029)

COURSE CODE : XCSHA1