**Quiz Game**

**Overview**

The Quiz Game is an interactive, text-based Python application designed to test your knowledge across multiple topics. The game consists of a series of multiple-choice questions where users can input their answers and receive instant feedback.

**Features**

* **Interactive Gameplay**: Users can engage with a series of questions and receive feedback on each answer.
* **Dynamic Scoring**: Tracks your score throughout the quiz and displays the final score as a percentage.
* **Exit Option**: Allows users to quit the game at any point by entering 'Q'.
* **Error Handling**: Ensures valid input for each question, guiding the user for incorrect formats.

**How It Works**

1. Upon running the program, users are welcomed to the Quiz Game.
2. The user is prompted to start the quiz by typing "Yes".
3. A series of multiple-choice questions are displayed one at a time.
4. Users input their answers (A, B, C, or D) for each question.
5. The program evaluates the answer, displays whether it is correct or not, and provides the correct answer if wrong.
6. The user can track their score after each question.
7. At any time, users can exit the quiz by typing 'Q'.
8. At the end of the quiz, the program displays the total score and percentage of correct answers.

**Technologies Used**

* **Python**: The entire application is written in Python.

**Code Features**

* **Question Bank**: Questions and their answers are stored as a list of dictionaries for easy access.
* **Dynamic Options**: The options for each question are displayed dynamically, reducing hardcoding.
* **Score Calculation**: Tracks and calculates the user’s score in real-time.
* **Input Validation**: Ensures valid input, preventing unexpected errors.

**How to Run**

1. Ensure Python is installed on your system (Python 3.x recommended).
2. Copy the program's code into a .py file (e.g., quiz\_game.py).
3. Open a terminal or command prompt and navigate to the directory containing the file.
4. Run the program using the command:
5. python quiz\_game.py
6. Follow the on-screen instructions to play the game.

**Example Questions**

Here are some sample questions from the game:

* What is 2 + 7? (A. 3, B. 9, C. 6, D. 10)
* Which keyword is used to define a function in Python? (A. def, B. function, C. define, D. func)
* What is the capital of Australia? (A. Sydney, B. Melbourne, C. Canberra, D. Perth)

**Exit Option**

At any point during the quiz, you can exit the game by typing 'Q'. The program will display your progress and terminate gracefully.

**Acknowledgements**

This program was developed as a fun project to explore Python's capabilities in interactive applications. Special thanks to all the developers and communities who provide support for Python learners.

**License**

This project is open-source and free to use. Feel free to modify and expand it as needed.