FIRST WEEK INTERNSHIP- PROJECT

Aim:

To create a basic quiz game using the python programming language.

Project Overview:

Welcome to your first week of the Python programming internship program! In this project, you will be creating a Basic Quiz Game using the Python programming language. The goal is to provide you with hands-on experience in Python and reinforce your understanding of basic programming concepts.

Project Objectives:

Before stating the scope of work needed for this project, it's essential first to identify all of its objectives. Noting the goals that this project is aiming to achieve will help in determining its inclusions and limits. Project: Basic Quiz Game Duration: 7 Days Project Overview Build a simple quiz game that asks users a series of questions. Implement a scoring system to evaluate the user's performance. Enhance user interaction by allowing them to input their answers. Reinforce Python fundamentals, including data structures, control flow, and user input handling. Gain practical experience in structuring a small Python project.

Requirements and Features:

Questions and Options: Design the quiz with at least three questions. Each question should have multiple-choice options. Scoring System: Implement a scoring mechanism to track the user's correct answers. User Input: Allow users to input their answers. Use appropriate validation to handle user input. Feedback: Provide feedback on each question, indicating whether the user's answer was correct or incorrect. Display the correct answer if the user is wrong. Final Score: Display the user's final score at the end of the quiz. Customization: Make it easy to customize the quiz by modifying the questions, options, and correct answers. Code Structure: Organize your code into functions or classes for better readability and maintainability.

Source Code:

class Quiz:

def \_\_init\_\_(self, questions):

self.questions = questions

self.score = 0

def display\_question(self, question\_num):

question, options, answer = self.questions[question\_num]

print(f"\nQuestion {question\_num + 1}: {question}")

for i, option in enumerate(options):

print(f"{i + 1}. {option}")

user\_answer = input("Your answer: ")

return int(user\_answer) - 1, answer

def check\_answer(self, user\_answer, correct\_answer):

if user\_answer == correct\_answer:

print("Correct!")

self.score += 1

else:

print("Incorrect. The correct answer is:", correct\_answer + 1)

def run\_quiz(self):

print("Welcome to the Quiz Game!")

for i in range(len(self.questions)):

user\_answer, correct\_answer = self.display\_question(i)

self.check\_answer(user\_answer, correct\_answer)

print("\nQuiz completed!")

print("Your final score is:", self.score)

if \_\_name\_\_ == "\_\_main\_\_":

questions = [

("What is the capital of France?", ["London", "Paris", "Berlin"], 1),

("Which planet is known as the Red Planet?", ["Mars", "Jupiter", "Venus"], 0),

("What is the largest mammal?", ["Elephant", "Whale", "Giraffe"], 1)

]

quiz = Quiz(questions)

quiz.run\_quiz()

Output:

Welcome to the Quiz Game!

Question 1: What is the capital of France?

1. London

2. Paris

3. Berlin

Your answer: 2

Correct!

Question 2: Which planet is known as the Red Planet?

1. Mars

2. Jupiter

3. Venus

Your answer: 1

Correct!

Question 3: What is the largest mammal?

1. Elephant

2. Whale

3. Giraffe

Your answer: 2

Correct!

Quiz completed!

Your final score is: 3

=== Code Execution Successful ===

Result:

Source code and output for the basic quiz game using the python programming language .