**LEVEL-1**

**Develop a console-based quiz application that asks users multiple-choice questions and calculates their score at the end.**

# Define the questions, choices, and correct answers

questions = [

{

"question": "What is the capital of France?",

"choices": ["A. Berlin", "B. Madrid", "C. Paris", "D. Rome"],

"correct\_answer": "C"

},

{

"question": "Which planet is known as the Red Planet?",

"choices": ["A. Earth", "B. Mars", "C. Venus", "D. Jupiter"],

"correct\_answer": "B"

},

{

"question": "Who wrote the play 'Romeo and Juliet'?",

"choices": ["A. Charles Dickens", "B. William Shakespeare", "C. Mark Twain", "D. Jane Austen"],

"correct\_answer": "B"

},

{

"question": "What is the largest ocean on Earth?",

"choices": ["A. Atlantic Ocean", "B. Indian Ocean", "C. Pacific Ocean", "D. Arctic Ocean"],

"correct\_answer": "C"

},

{

"question": "What is the boiling point of water in Celsius?",

"choices": ["A. 90°C", "B. 100°C", "C. 110°C", "D. 120°C"],

"correct\_answer": "B"

}

]

def ask\_question(question, choices, correct\_answer):

"""

Ask the user a question and check their answer.

"""

print(question)

for choice in choices:

print(choice)

# Get the user's answer

answer = input("Please choose your answer (A, B, C, D): ").strip().upper()

# Check if the answer is correct

if answer == correct\_answer:

print("Correct!\n")

return 1 # Correct answer

else:

print(f"Wrong! The correct answer is {correct\_answer}.\n")

return 0 # Incorrect answer

def run\_quiz():

"""

Run the quiz, ask questions, and calculate the score.

"""

score = 0

total\_questions = len(questions)

# Ask each question in the list

for question\_data in questions:

question = question\_data["question"]

choices = question\_data["choices"]

correct\_answer = question\_data["correct\_answer"]

score += ask\_question(question, choices, correct\_answer)

# Display the final score

print(f"Your final score is {score} out of {total\_questions}.")

# Give feedback based on score

if score == total\_questions:

print("Excellent! You got all the answers right!")

elif score >= total\_questions // 2:

print("Good job! You answered more than half correctly.")

else:

print("Better luck next time!")

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

print("Welcome to the Quiz!")

run\_quiz()