

SIMPLE QUIZ GAME

Features -

1. Multiple players can play one after another.

2. Each player gets random questions from a shared pool.

3. Once a question is asked, it is removed from the pool (no repetition).

4. A scoreboard keeps track of all players' scores.

5. Final scoreboard is displayed at the end (ranked by score).

Question Bank

```
import random
```

```
quiz_questions = [
```

```
{
```

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

```
    "options": ["A. Paris", "B. London", "C. Rome", "D. Berlin"],
```

```
    "answer": "A"
```

```
},
```

```
{
```

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

```
    "options": ["A. Venus", "B. Mars", "C. Jupiter", "D. Saturn"],
```

```
    "answer": "B"
```

```
},
```

```
{
```

```
    "question": "Who developed the theory of relativity?",
```

```
    "options": ["A. Newton", "B. Tesla", "C. Einstein", "D. Galileo"],
```

```
    "answer": "C"
```

```
},
```

```
{
```

```
    "question": "What is the largest mammal in the world?",
```

```
    "options": ["A. Elephant", "B. Blue Whale", "C. Giraffe", "D. Hippopotamus"],
```

```
    "answer": "B"
```

```
},
```

```
{
```

```
    "question": "Which language is used to write web pages?",
```

```
    "options": ["A. Python", "B. HTML", "C. Java", "D. C++"],
```

```
    "answer": "B"
```

```
},
```

```
{
```

```
    "question": "What is the chemical symbol for water?",
```

```
    "options": ["A. CO2", "B. H2O", "C. O2", "D. HO"],
```

```
    "answer": "B"
```

```
},
```

```
{
```

```
    "question": "Who painted the Mona Lisa?",
```

```
    "options": ["A. Van Gogh", "B. Picasso", "C. Da Vinci", "D. Michelangelo"],
```

```
    "answer": "C"
```

```
},
```

```
{
  "question": "Which is the smallest prime number?",
  "options": ["A. 1", "B. 2", "C. 3", "D. 5"],
  "answer": "B"
},
{
  "question": "Which country is known as the Land of the Rising Sun?",
  "options": ["A. China", "B. Japan", "C. Korea", "D. Thailand"],
  "answer": "B"
},
{
  "question": "Which gas do plants absorb during photosynthesis?",
  "options": ["A. Oxygen", "B. Carbon Dioxide", "C. Nitrogen", "D. Hydrogen"],
  "answer": "B"
},
{
  "question": "Who was the first man to step on the moon?",
  "options": ["A. Neil Armstrong", "B. Buzz Aldrin", "C. Yuri Gagarin", "D. Michael Collins"],
  "answer": "A"
},
{
  "question": "Which ocean is the largest?",
  "options": ["A. Atlantic", "B. Indian", "C. Arctic", "D. Pacific"],
  "answer": "D"
},
{
  "question": "What is the capital of Australia?",
  "options": ["A. Sydney", "B. Melbourne", "C. Canberra", "D. Perth"],
  "answer": "C"
},
{
  "question": "Who wrote 'Romeo and Juliet'?",
  "options": ["A. Charles Dickens", "B. William Shakespeare", "C. Mark Twain", "D. Jane Austen"],
  "answer": "B"
},
{
  "question": "Which is the hardest natural substance on Earth?",
  "options": ["A. Gold", "B. Diamond", "C. Iron", "D. Platinum"],
  "answer": "B"
}
]
```

Function to Run Quiz for a Single Player

```
def play_quiz(player_name, question_pool, num_questions=5):
```

```
    """
```

Run the quiz for one player.

Args:

player_name (str): The name of the player.

question_pool (list): Shared pool of available questions.

num_questions (int): Number of questions to ask (default = 5).

Returns:

int: Final score of the player.

```
    """
```

```
    print(f"\n👤 Welcome, {player_name}! Let's start the quiz.\n")
```

```
    score = 0
```

Select random questions from the shared pool

```
    selected_questions = random.sample(question_pool, min(num_questions, len(question_pool)))
```

```
    for q in selected_questions:
```

```
        print(f"Q: {q['question']}")
```

```
        for option in q['options']:
```

```
            print(option)
```

Get player's answer

```
    answer = input("Your choice (A/B/C/D): ").strip().upper()
```

Validate and check answer

```
    if answer == q["answer"]:
```

```
        print("✅ Correct!\n")
```

```
        score += 1
```

```
    else:
```

```
        print(f"❌ Wrong! The correct answer was: {q['answer']}\n")
```

Remove asked question so it won't repeat for other players

```
    question_pool.remove(q)
```

Show player's final score

```
    print(f"🎯 {player_name}, your final score: {score}/{len(selected_questions)}\n")
```

```
    return score
```

Main Program

```
def main():
```

```
    """
```

Main function to manage the quiz game.

Allows multiple players to play until question pool is exhausted.

```
    """
```

```
    question_pool = quiz_questions.copy() # Shared pool for all players
```

```
    scoreboard = {} # Dictionary to store player names and scores
```

```
    print("==== 🎮 Welcome to the Quiz Game! 🎮 =====")
```

Keep playing while there are questions left

```
while question_pool:
```

Get player name

```
player_name = input("\nEnter player name: ").strip()
```

Run quiz for the player

```
score = play_quiz(player_name, question_pool)
```

```
scoreboard[player_name] = score
```

If no questions remain, stop

```
if not question_pool:
```

```
    print("\n⚠ No more questions left in the pool!")
```

```
    break
```

Ask if another player wants to join

```
choice = input("Do you want another player to play? (yes/no): ").strip().lower()
```

```
if choice != "yes":
```

```
    break
```

Display final scoreboard (ranked by score)

```
print("\n===== 🏆 Final Scoreboard 🏆 =====")
```

```
ranked_scores = sorted(scoreboard.items(), key=lambda x: x[1], reverse=True)
```

```
for rank, (player, score) in enumerate(ranked_scores, start=1):
```

```
    print(f"{rank}. {player}: {score}")
```

```
print("\n✅ Game Over! Thanks for playing.")
```

Run the Game

```
if __name__ == "__main__":
```

```
    main()
```

CODE SCREENSHOTS

```
[1]
✓ 2m

# Simple Quiz Game

# Features -
# 1. Multiple players can play one after another.
# 2. Each player gets random questions from a shared pool.
# 3. Once a question is asked, it is removed from the pool (no repetition).
# 4. A scoreboard keeps track of all players' scores.
# 5. Final scoreboard is displayed at the end (ranked by score).

# Question Bank
import random
quiz_questions = [
    {
        "question": "What is the capital of France?",
        "options": ["A. Paris", "B. London", "C. Rome", "D. Berlin"],
        "answer": "A"
    },
    {
        "question": "Which planet is known as the Red Planet?",
        "options": ["A. Venus", "B. Mars", "C. Jupiter", "D. Saturn"],
        "answer": "B"
    },
    {
        "question": "Who developed the theory of relativity?",
        "options": ["A. Newton", "B. Tesla", "C. Einstein", "D. Galileo"],
        "answer": "C"
    },
    {
        "question": "What is the largest mammal in the world?",
        "options": ["A. Elephant", "B. Blue Whale", "C. Giraffe", "D. Hippopotamus"],
        "answer": "B"
    },
    {
        "question": "Which language is used to write web pages?",
        "options": ["A. Python", "B. HTML", "C. Java", "D. C++"],
        "answer": "B"
    },
    {
        "question": "What is the chemical symbol for water?",
        "options": ["A. CO2", "B. H2O", "C. O2", "D. H2"],
        "answer": "B"
    }
]
```

```
[1]
2m

# Function to Run Quiz for a Single Player
def play_quiz(player_name, question_pool, num_questions=5):
    """
    Run the quiz for one player.
    Args:
        player_name (str): The name of the player.
        question_pool (list): Shared pool of available questions.
        num_questions (int): Number of questions to ask (default = 5).
    Returns:
        int: Final score of the player.
    """
    print(f"\n👋 Welcome, {player_name}! Let's start the quiz.\n")
    score = 0

    # Select random questions from the shared pool
    selected_questions = random.sample(question_pool, min(num_questions, len(question_pool)))
    for q in selected_questions:
        print(f"Q: {q['question']}")
        for option in q['options']:
            print(option)

        # Get player's answer
        answer = input("Your choice (A/B/C/D): ").strip().upper()

        # Validate and check answer
        if answer == q["answer"]:
            print("✅ Correct!\n")
            score += 1
        else:
            print(f"❌ Wrong! The correct answer was: {q['answer']}\n")

        # Remove asked question so it won't repeat for other players
        question_pool.remove(q)

    # Show player's final score
    print(f"🎉 {player_name}, your final score: {score}/{len(selected_questions)}\n")
    return score

# Main Program
def main():
    """
    Main function to manage the quiz game.
    Allows multiple players to play until question pool is exhausted.
    """
```

```
[1]
✓ 2m

# Main Program
def main():
    """
    Main function to manage the quiz game.
    Allows multiple players to play until question pool is exhausted.
    """

    question_pool = quiz_questions.copy() # Shared pool for all players
    scoreboard = {} # Dictionary to store player names and scores
    print("===== 🎮 Welcome to the Quiz Game! 🎮 =====")

    # Keep playing while there are questions left
    while question_pool:

        # Get player name
        player_name = input("\nEnter player name: ").strip()

        # Run quiz for the player
        score = play_quiz(player_name, question_pool)
        scoreboard[player_name] = score

        # If no questions remain, stop
        if not question_pool:
            print("\n⚠️ No more questions left in the pool!")
            break

        # Ask if another player wants to join
        choice = input("Do you want another player to play? (yes/no): ").strip().lower()
        if choice != "yes":
            break

    # Display final scoreboard (ranked by score)
    print("\n===== 🏆 Final Scoreboard 🏆 =====")
    ranked_scores = sorted(scoreboard.items(), key=lambda x: x[1], reverse=True)
    for rank, (player, score) in enumerate(ranked_scores, start=1):
        print(f"{rank}. {player}: {score}")
    print("\n✅ Game Over! Thanks for playing.")

# Run the Game
if __name__ == "__main__":
    main()
```

OUTPUT SCREENSHOTS

```
===== 🎮 Welcome to the Quiz Game! 🎮 =====  
Enter player name: Hrituraj  
  
👤 Welcome, Hrituraj! Let's start the quiz.  
  
Q: Who developed the theory of relativity?  
A. Newton  
B. Tesla  
C. Einstein  
D. Galileo  
Your choice (A/B/C/D): C  
✅ Correct!  
  
Q: Who was the first man to step on the moon?  
A. Neil Armstrong  
B. Buzz Aldrin  
C. Yuri Gagarin  
D. Michael Collins  
Your choice (A/B/C/D): A  
✅ Correct!  
  
Q: What is the capital of Australia?  
A. Sydney  
B. Melbourne  
C. Canberra  
D. Perth  
Your choice (A/B/C/D): A  
❌ Wrong! The correct answer was: C  
  
Q: What is the capital of France?  
A. Paris  
B. London  
C. Rome  
D. Berlin  
Your choice (A/B/C/D): A  
✅ Correct!  
  
Q: What is the largest mammal in the world?  
A. Elephant  
B. Blue Whale  
C. Giraffe  
D. Hippopotamus  
Your choice (A/B/C/D): B  
✅ Correct!
```

```
🎮 Hrituraj, your final score: 4/5  
Do you want another player to play? (yes/no): yes  
Enter player name: John  
  
👤 Welcome, John! Let's start the quiz.  
  
Q: Which planet is known as the Red Planet?  
A. Venus  
B. Mars  
C. Jupiter  
D. Saturn  
Your choice (A/B/C/D): B  
✅ Correct!  
  
Q: Which is the smallest prime number?  
A. 1  
B. 2  
C. 3  
D. 5  
Your choice (A/B/C/D): A  
❌ Wrong! The correct answer was: B  
  
Q: Which language is used to write web pages?  
A. Python  
B. HTML  
C. Java  
D. C++  
Your choice (A/B/C/D): B  
✅ Correct!  
  
Q: Who painted the Mona Lisa?  
A. Van Gogh  
B. Picasso  
C. Da Vinci  
D. Michelangelo  
Your choice (A/B/C/D): C  
✅ Correct!  
  
Q: Which is the hardest natural substance on Earth?  
A. Gold  
B. Diamond  
C. Iron  
D. Platinum  
Your choice (A/B/C/D): B  
✅ Correct!
```

```
🎮 John, your final score: 4/5  
Do you want another player to play? (yes/no): yes  
Enter player name: Seth  
  
👤 Welcome, Seth! Let's start the quiz.  
  
Q: Which gas do plants absorb during photosynthesis?  
A. Oxygen  
B. Carbon Dioxide  
C. Nitrogen  
D. Hydrogen  
Your choice (A/B/C/D): A  
❌ Wrong! The correct answer was: B  
  
Q: Which ocean is the largest?  
A. Atlantic  
B. Indian  
C. Arctic  
D. Pacific  
Your choice (A/B/C/D): C  
❌ Wrong! The correct answer was: D  
  
Q: What is the chemical symbol for water?  
A. CO2  
B. H2O  
C. O2  
D. HO  
Your choice (A/B/C/D): B  
✅ Correct!  
  
Q: Which country is known as the Land of the Rising Sun?  
A. China  
B. Japan  
C. Korea  
D. Thailand  
Your choice (A/B/C/D): B  
✅ Correct!  
  
Q: Who wrote 'Romeo and Juliet'?  
A. Charles Dickens  
B. William Shakespeare  
C. Mark Twain  
D. Jane Austen  
Your choice (A/B/C/D): B  
✅ Correct!
```

Q: Who wrote 'Romeo and Juliet'?

A. Charles Dickens

B. William Shakespeare

C. Mark Twain

D. Jane Austen

Your choice (A/B/C/D): B

✅ Correct!

🎯 Seth, your final score: 3/5

⚠️ No more questions left in the pool!

===== 🏆 Final Scoreboard 🏆 =====

1. Hrituraj: 4

2. John: 4

3. Seth: 3

✅ Game Over! Thanks for playing.