

### **Code Implementation:**

```
```
```

```
Import random
```

```
# Define the crossword puzzle grid size
```

```
GRID_SIZE = 15
```

```
# Define the crossword puzzle grid
```

```
Grid = [['_' for _ in range(GRID_SIZE)] for _ in range(GRID_SIZE)]
```

```
# Define the crossword puzzle clues
```

```
Clues = {
```

```
    'Across': {
```

```
        '1': {'clue': 'Flower', 'answer': 'ROSE', 'row': 0, 'col': 0},
```

```
        '2': {'clue': 'Animal', 'answer': 'CAT', 'row': 2, 'col': 0},
```

```
        '3': {'clue': 'City', 'answer': 'PARIS', 'row': 4, 'col': 0},
```

```
    },
```

```
    'Down': {
```

```
        '1': {'clue': 'Food', 'answer': 'PIZZA', 'row': 0, 'col': 2},
```

```
        '2': {'clue': 'Sport', 'answer': 'FOOTBALL', 'row': 0, 'col': 4},
```

```
        '3': {'clue': 'Music', 'answer': 'GUITAR', 'row': 2, 'col': 2},
```

```
    }
```

```
}
```

```
# Function to print the crossword puzzle grid
```

```
Def print_grid():
```

```
For row in grid:
```

```
    Print(' '.join(row))
```

```
# Function to fill in the crossword puzzle grid with answers
```

```
Def fill_grid():
```

```
    For direction, clues_list in clues.items():
```

```
        For clue_id, clue in clues_list.items():
```

```
            Answer = clue['answer']
```

```
            Row = clue['row']
```

```
            Col = clue['col']
```

```
            If direction == 'Across':
```

```
                For i, letter in enumerate(answer):
```

```
                    Grid[row][col + i] = letter
```

```
            Elif direction == 'Down':
```

```
                For i, letter in enumerate(answer):
```

```
                    Grid[row + i][col] = letter
```

```
# Function to play the crossword puzzle game
```

```
Def play_game():
```

```
    Fill_grid()
```

```
    Print("Welcome to the Crossword Puzzle Game!")
```

```
    Print_grid()
```

```
    While True:
```

```
        Direction = input("Enter the direction (Across/Down): ")
```

```
        Clue_id = input("Enter the clue ID: ")
```

```
        Answer = input("Enter your answer: ")
```

If direction == 'Across':

Clue = clues['Across'][clue\_id]

Elif direction == 'Down':

Clue = clues['Down'][clue\_id]

If answer.upper() == clue['answer']:

Print("Correct!")

Else:

Print("Incorrect. The correct answer is", clue['answer'])

# Start the game

Play\_game()

...

bia final project.py - C:/Users/My Pc/AppData/Local/Programs/Python/Python312/bia final project.py (3.12.6)

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```
# Function to print the crossword puzzle grid
def print_grid():
    for row in grid:
        print(' '.join(row))

# Function to fill in the crossword puzzle grid with answers
def fill_grid():
    for direction, clues_list in clues.items():
        for clue_id, clue in clues_list.items():
            answer = clue['answer']
            row = clue['row']
            col = clue['col']
            if direction == 'Across':
                for i, letter in enumerate(answer):
                    grid[row][col + i] = letter
            elif direction == 'Down':
                for i, letter in enumerate(answer):
                    grid[row + i][col] = letter

# Function to play the crossword puzzle game
def play_game():
    fill_grid()
    print("Welcome to the Crossword Puzzle Game!")
    print_grid()
    while True:
        direction = input("Enter the direction (Across/Down): ")
        clue_id = input("Enter the clue ID: ")
        answer = input("Enter your answer: ")
        if direction == 'Across':
            clue = clues['Across'][clue_id]
        elif direction == 'Down':
            clue = clues['Down'][clue_id]
        if answer.upper() == clue['answer']:
            print("Correct!")
        else:
            print("Incorrect. The correct answer is", clue['answer'])

# Start the game
play_game()
```

