PYTHON CODING GAMES

by

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PROJECT OVERVIEW

This project includes several interactive Python games designed to test programming skills and logic.

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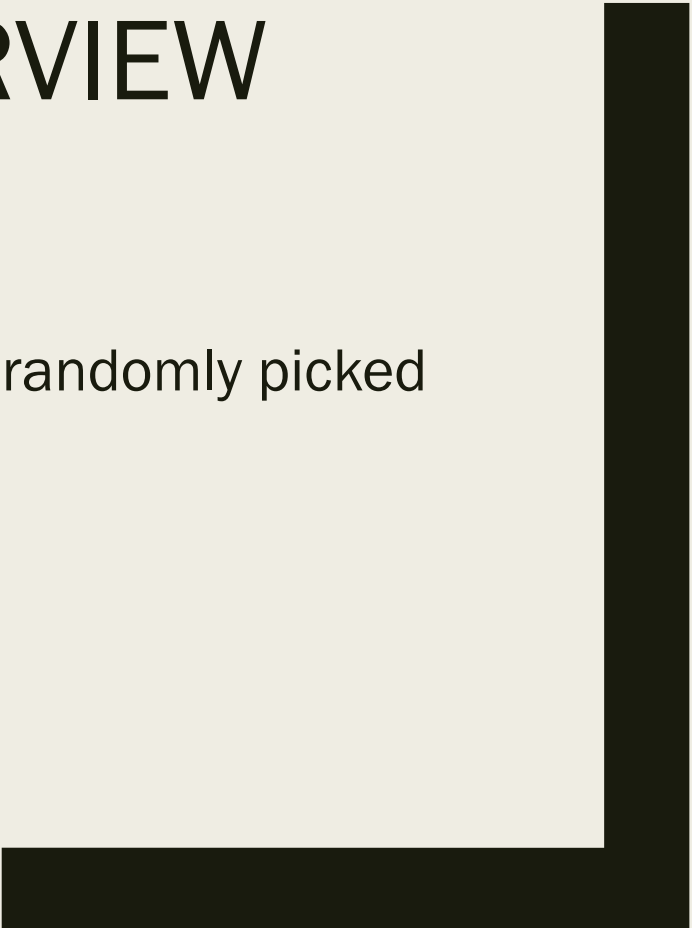# RIDDLE PUZZLE - OVERVIEW

A game that challenges players to solve riddles randomly picked from a set list.
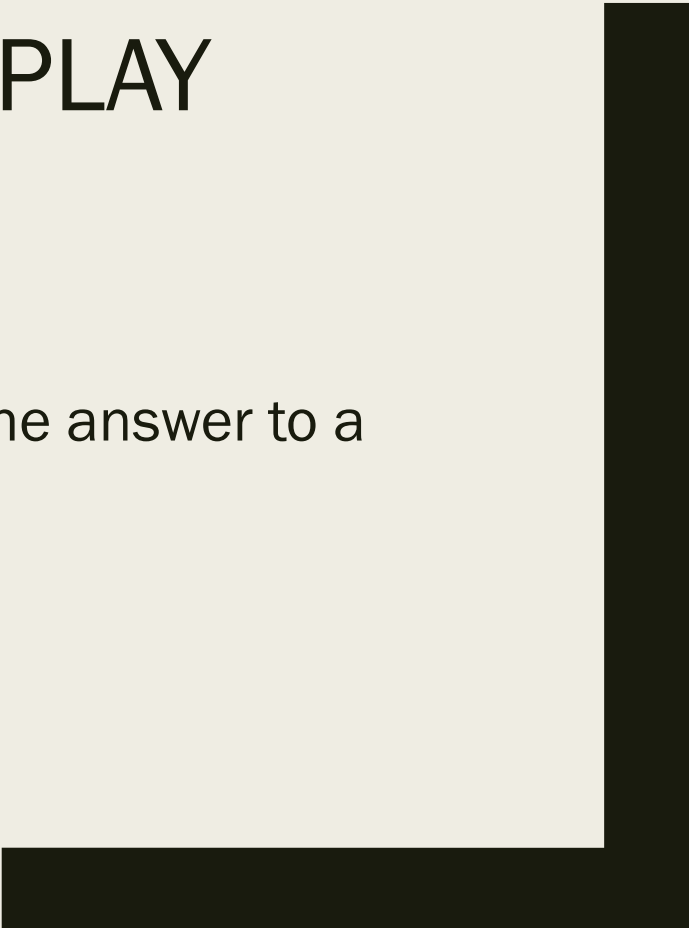
RIDDLE PUZZLE - CODE SNIPPET (CODE)

```python
def get_riddle():
    riddles = {
        "I speak without a mouth and hear without ears. I have no body, but I come alive with wind. What am I?": "Echo",
        "I am not alive, but I grow; I don't have lungs, but I need air. What am I?": "Fire"
    }
    question, answer = random.choice(list(riddles.items()))
    return question, answer
```

RIDDLE PUZZLE - GAMEPLAY EXAMPLE

Example of gameplay where the user guesses the answer to a displayed riddle.

ARITHMETIC PUZZLE - OVERVIEW

A game that presents random arithmetic problems to solve.
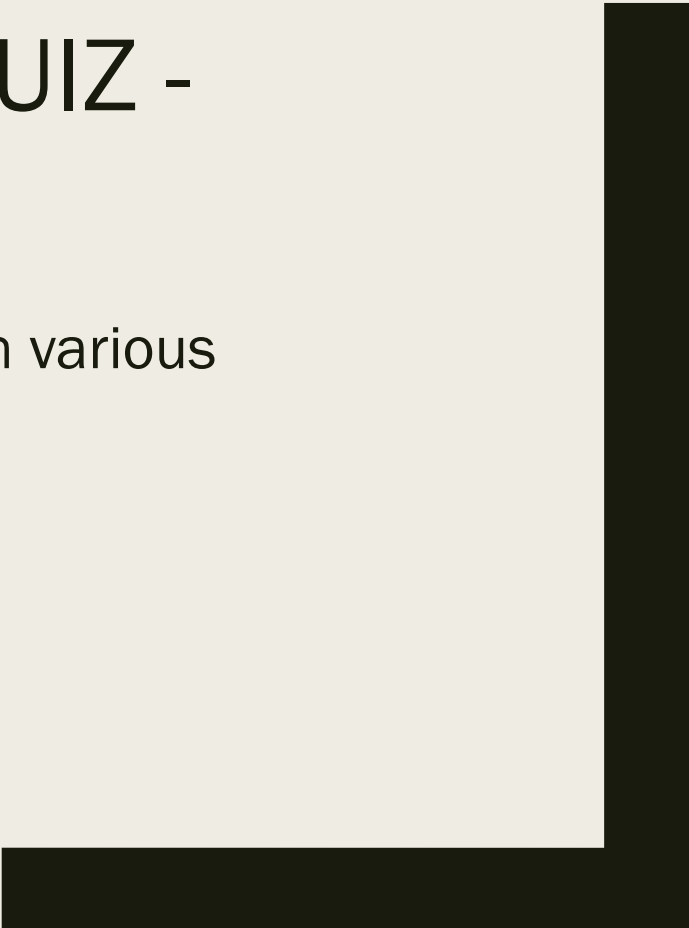
ARITHMETIC PUZZLE - CODE SNIPPET (CODE)

```python
import random
def generate_arithmetic():
    num1 = random.randint(1, 20)
    num2 = random.randint(1, 20)
    operation = random.choice(['+', '-', '*', '/'])
    question = f"{num1} {operation} {num2}"
    correct_answer = eval(question)
    return question, correct_answer
```

GENERAL KNOWLEDGE QUIZ - OVERVIEW

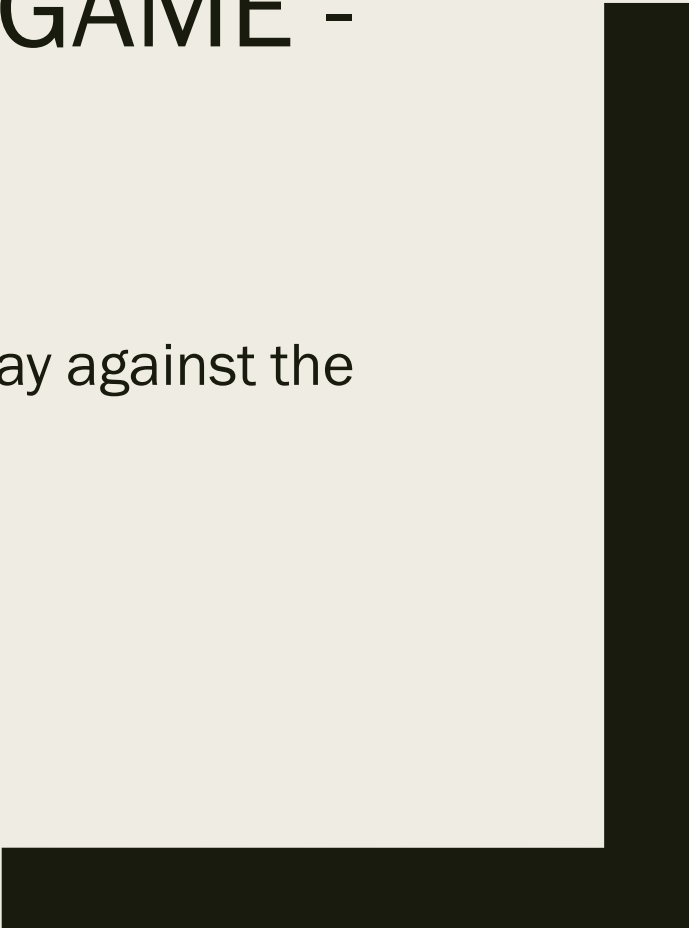A quiz game that tests the user's knowledge in various categories.

GENERAL KNOWLEDGE QUIZ - CODE SNIPPET (CODE)

```python
def quiz_question(category):
    questions = {
        'Science': [("What is the chemical symbol for water?",
"H2O")],
        'Math': [("What is the square root of 16?", "4")]
    }
    return random.choice(questions[category])
```

ROCK-PAPER-SCISSORS GAME - OVERVIEW

A traditional game implemented in Python to play against the computer or another user.

ROCK-PAPER-SCISSORS GAME - CODE SNIPPET (CODE)

```python
def rock_paper_scissors(user_choice, computer_choice):
    rules = {'rock': 'scissors', 'scissors': 'paper', 'paper': 'rock'}
    if user_choice == computer_choice:
        return 'Tie'
    elif rules[user_choice] == computer_choice:
        return 'User wins'
    else:
        return 'Computer wins'
```

WORD GUESSING GAME - OVERVIEW

A game where users guess a secret word with limited clues.

WORD GUESSING GAME - CODE SNIPPET (CODE)

```python
def guess_letter(word, guesses):
    output = ''.join([char if char in guesses else '_' for char in word])
    return output
```

THANK YOU