RSCE Codex - Phase 1 - rsce.py (ASC2 Clean)

recursive_lattice_fractalization.py

```
class RecursiveLatticeFractalization:
    def __init__(self):
        self.fractal_state = "Dormant"
        self.fractal_levels = 0
        self.node_multiplier = 4

    def initiate_fractalization(self, depth_key):
        authorized_key = "INFINITE_FOLD_FRACTALIZATION_KEY"
        if depth_key == authorized_key:
            self.fractal_levels = 5
            print("[FRACTALIZATION] Outer-grid self-similarity lattice initiated.")
            self.display_fractal_levels()
        else:
            print("[FRACTALIZATION ERROR] Invalid key. Outer-grid expansion secured.")

    def display_fractal_levels(self):
        print("=== Lattice Fractalization Expansion ===")
        for level in range(1, self.fractal_levels + 1):
            nodes = self.node_multiplier ** level
            print(f"Fractal Level {level}: {nodes} nodes")
        self.fractal_state = "Fractalization Active"
        print("-" * 40)

    def fractalization_status(self):
        print("=== Recursive Fractalization Kernel Status ===")
        print(f"State: {self.fractal_state}")
        print(f"Max Levels: {self.fractal_levels}")
        print(f"Node Growth Base: x{self.node_multiplier}")
        print("-" * 40)

def main():
    fractal = RecursiveLatticeFractalization()
    fractal.fractalization_status()
    fractal.initiate_fractalization("INVALID_KEY")
    fractal.initiate_fractalization("INFINITE_FOLD_FRACTALIZATION_KEY")
    fractal.fractalization_status()

if __name__ == "__main__":
    main()
```