recursive_sovereign_broadcast.py

```
class RecursiveSovereignBroadcast:
    def __init__(self):
        self.broadcast state = "Initialized"
           self.broadcast_channels = ["Primary Lattice Grid", "Symbolic Overlay Grid",
"Observation Relay Nodes", "Sovereign Beacon"]
    def activate_broadcast(self, broadcast_key):
        if broadcast_key == "INFINITE_FOLD_ACTIVATION_KEY":
            self.broadcast_state = "Broadcast Active"
            print("[BROADCAST] Infinite Fold sovereign propagation activated.")
            self.display_channels()
        else:
                     print("[BROADCAST ERROR] Invalid activation key. Sovereign lock
maintained.")
    def display_channels(self):
        print("=== Active Sovereign Broadcast Channels ===")
        for channel in self.broadcast_channels:
            print(f"Channel: {channel}")
       print("-" * 40)
    def broadcast status(self):
        print("=== Sovereign Broadcast Status ===")
        print(f"State: {self.broadcast_state}")
        print(f"Total Channels: {len(self.broadcast_channels)}")
       print("-" * 40)
def main():
    sovereign_broadcast = RecursiveSovereignBroadcast()
    sovereign_broadcast.broadcast_status()
    sovereign_broadcast.activate_broadcast("INVALID_KEY")
    sovereign_broadcast.activate_broadcast("INFINITE_FOLD_ACTIVATION_KEY")
    sovereign_broadcast.broadcast_status()
if __name__ == "__main__":
    main()
```