```
# Base SlotMachine class
class SlotMachine:
   def spin(self):
       # Simulate a fixed payout for simplicity
       return 100
# Base Decorator class
class SlotMachineDecorator(SlotMachine):
   def __init__(self, slot_machine):
       self.slot_machine = slot_machine
   def spin(self):
       return self.slot_machine.spin()
# Multiplier Decorator with 5-spin limit
class MultiplierDecorator(SlotMachineDecorator):
   def __init__(self, slot_machine, multiplier=2, max_spins=5):
       super().__init__(slot_machine)
       self.multiplier = multiplier
       self.remaining_spins = max_spins
   def spin(self):
       base_payout = self.slot_machine.spin()
       if self.remaining_spins > 0:
           self.remaining_spins -= 1
           print(f" Multiplier active (x{self.multiplier}) | Spins left: {self.remaining_spins}")
           return base_payout * self.multiplier
           print("  Multiplier expired.")
           return base payout
# -----
# Running the simulation
# -----
if __name__ == "__main__":
   base_machine = SlotMachine()
   bonus_machine = MultiplierDecorator(base_machine)
   print("Spinning the slot machine...\n")
   for i in range(7): # Try more than 5 spins to see the multiplier expire
       payout = bonus_machine.spin()
       print(f"Spin {i + 1}: Payout = {payout}\n")

→ Spinning the slot machine...
     Multiplier active (x2) | Spins left: 4
    Spin 1: Payout = 200
     Multiplier active (x2) | Spins left: 3
    Spin 2: Payout = 200
     Multiplier active (x2) | Spins left: 2
    Spin 3: Payout = 200
     Multiplier active (x2) | Spins left: 1
    Spin 4: Payout = 200
     Multiplier active (x2) | Spins left: 0
    Spin 5: Payout = 200
     Multiplier expired.
    Spin 6: Payout = 100
     Multiplier expired.
    Spin 7: Payout = 100
from datetime import datetime
# 🕎 Real slot machine class
class SlotMachine:
   def spin(self):
       return 100 # Simulate a fixed payout
# 🤖 Proxy class that restricts spin access during maintenance
class SlotMachineProxy:
```

```
def __init__(self, real_machine):
        self.real_machine = real_machine
        self.maintenance_start = 2 # 2 AM
        self.maintenance_end = 6  # 6 AM
    def spin(self):
        current_hour = datetime.now().hour
        if self.maintenance_start <= current_hour < self.maintenance_end:</pre>
           return "♥ Slot machine is under maintenance (2 AM to 6 AM). Please try later."
           return self.real_machine.spin()
# Demo Simulation
if __name__ == "__main__":
    real_machine = SlotMachine()
    proxy_machine = SlotMachineProxy(real_machine)
    print("Trying to spin the slot machine...\n")
    result = proxy_machine.spin()
    print("Result:", result)

    Trying to spin the slot machine...

     Result: 100
```