

Simple Python booking application that utilizes loops, conditional statements, and basic user input. This example focuses on booking hotel rooms. Users can choose a room type and specify the number of nights they want to stay.

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``python
# Sample Booking Application

# Function to display available rooms
def display_available_rooms():
    print("Available Rooms:")
    print("1. Single Room - $50 per night")
    print("2. Double Room - $80 per night")
    print("3. Suite - $120 per night")

# Function to calculate the total cost
def calculate_total_cost(room_price, nights):
    return room_price * nights

# Main Program
print("Welcome to the Booking Application!")

# Display available rooms
display_available_rooms()

# Get user input for room selection
room_choice = int(input("Enter the room number you'd like to book (1-3): "))

# Validate user input
if room_choice not in [1, 2, 3]:
    print("Invalid choice. Please choose a valid room.")
else:
    # Get user input for the number of nights
    nights = int(input("Enter the number of nights you want to stay: "))

    # Calculate total cost based on room choice
    if room_choice == 1:
        room_type = "Single Room"
        room_price = 50
    elif room_choice == 2:
        room_type = "Double Room"
        room_price = 80
    else:
        room_type = "Suite"
        room_price = 120

    total_cost = calculate_total_cost(room_price, nights)

# Display booking summary
print("\nBooking Summary:")
```

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print(f"Room Type: {room_type}")
print(f"Price per Night: ${room_price}")
print(f"Number of Nights: {nights}")
print(f"Total Cost: ${total_cost}")

# Thank the user for booking
print("\nThank you for booking with us! Enjoy your stay.")
...
```

In this example:

- Users are presented with available room options.
- They enter the room number they want to book.
- The application validates the user's choice.
- Users enter the number of nights they want to stay.
- The program calculates and displays the booking summary, including the total cost.

This is a basic example, and you can extend the functionality based on your specific requirements. You could add features like user registration, payment processing, and more advanced room availability checking.