

```
# I am creating a class to handle booking information

class Reservation:

    """This is the class I am using to store booking and room details."""

    # In this constructor, I define the attributes for booking information

    def __init__(self, bookingid="", roomnumber="", customername="",
bookingstatus="", numberofnights=0, numberofguests=0):

        # These are my private attributes for storing booking details

        self.__bookingid = bookingid

        self.__roomnumber = roomnumber

        self.__customername = customername

        self.__bookingstatus = bookingstatus

        self.__numberofnights = numberofnights

        self.__numberofguests = numberofguests


    # I use this method to get the booking ID

    def get_bookingid(self):

        return self.__bookingid


    # I use this method to get the room number

    def get_roomnumber(self):

        return self.__roomnumber


    # This method helps me retrieve the customer's name

    def get_customername(self):

        return self.__customername


    # I use this method to get the booking status
```

```
def get_bookingstatus(self):  
    return self.__bookingstatus  
  
# This method allows me to get the number of nights for the booking  
  
def get_numberofnights(self):  
    return self.__numberofnights  
  
  
# I use this method to get the number of guests  
  
def get_numberofguests(self):  
    return self.__numberofguests  
  
  
# I use this method to set or update the booking ID  
  
def set_bookingid(self, bookingid):  
    self.__bookingid = bookingid  
  
  
# I use this method to set or update the room number  
  
def set_roomnumber(self, roomnumber):  
    self.__roomnumber = roomnumber  
  
  
# This method allows me to set or update the customer's name  
  
def set_customername(self, customername):  
    self.__customername = customername  
  
  
# I use this method to update the booking status  
  
def set_bookingstatus(self, bookingstatus):  
    self.__bookingstatus = bookingstatus  
  
  
# This method allows me to set the number of nights for the booking  
  
def set_numberofnights(self, numberofnights):
```

```

        self.__numberofnights = numberofnights

# I use this method to update the number of guests for the booking
def set_numberofguests(self, numberofguests):
    self.__numberofguests = numberofguests

# I created this method to display the booking details neatly
def display_booking_details(self):
# I'm using f-strings here to format and display all the booking details

    print(f"Booking ID: {self.__bookingid}")

    print(f"Room Number: {self.__roomnumber}")

    print(f"Customer Name: {self.__customername}")

    print(f"Booking Status: {self.__bookingstatus}")

    print(f"Number of Nights: {self.__numberofnights}")

    print(f"Number of Guests: {self.__numberofguests}")


# Now, I create an object of the Booking class with details for a guest
booking_info = Reservation(

    bookingid="B12345",

    roomnumber="101",

    customername="Ahmad Ali",

    bookingstatus="Confirmed",

    numberofnights=3,

    numberofguests=2

)

# I display the booking details using the method I defined earlier

```

```
booking_info.display_booking_details()

# I use the setter methods to update the booking ID and room number if
needed

# For example I'm changing the booking ID to "B54321" and the room number
to "102"

booking_info.set_bookingid("B54321")

booking_info.set_roomnumber("102")


# I'm displaying the updated booking details to confirm the changes worked
print("\nUpdated Booking Details:")

booking_info.display_booking_details()
```