

6. Hospital Management System

Program :

```
from abc import ABC, abstractmethod

# Abstraction
class Patient(ABC):

    def __init__(self):
        pass

    @abstractmethod
    def calculate_bill(self):
        pass

# Inheritance
class InPatient(Patient):

    def __init__(self):
        super().__init__()
        self.room_charge = 15000
        self.treatment_charge = 5000

    # Polymorphism (Overriding)
    def calculate_bill(self):
        return self.room_charge + self.treatment_charge
```

```
# ---- Main Program ----
```

```
patient_type = input("Enter Patient Type (InPatient): ")
```

```
if patient_type.lower() == "inpatient":
```

```
    p = InPatient()
```

```
else:
```

```
    print("Invalid Patient Type")
```

```
    exit()
```

```
print("Total Bill:", p.calculate_bill())
```

Output :

```
Enter Patient Type (InPatient): InPatient
```

```
Total Bill: 20000
```