**Relational Database Schema for Case Study**

1. student (s\_id, sname, mobile,gender, mess, address, department, year)

|  |  |  |  |
| --- | --- | --- | --- |
| **SNO** | **Attributes** | **Datatype** | **constraint** |
| 1 | S\_id | int | Primary key |
| 2 | Sname | Varchar(20) | Not null |
| 3 | Mobile | Varchar(10) | Not null |
| 4 | Gender | Char(1) | Not null check(gender='f' or gender='m') |
| 5 | Mess | Varchar(10) | Not null check(mess='veg' or mess='non-veg') |
| 6 | Address | Varchar(10) | Not null |
| 7 | department | Varchar(10) | Not null |

1. hostel (hostel\_id, hostel\_name, no\_of\_rooms, no\_of\_students)

**Hostel table:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno** | **Attributes** | **Datatype** | **Constraint** |
| 1 | Hostel\_id | int | Primary key |
| 2 | Hostel\_name | varchar(20) | Not null |
| 3 | No\_of\_rooms | int | Not null |
| 4 | No\_of\_students | Int | Not null |

1. room (room\_no, hostel\_id, room type, room\_size)

**Room table:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Attribute** | **Datatype** | **Constraint** |
| 1 | Room\_no | int | Primary key |
| 2 | Hostel\_id | int | Foreign key |
| 3 | Type | varchar(10) | Not null |
| 4 | Room\_size | int | Not null |

1. reservation (reservation\_id, student\_id, hostel\_id, room\_no, check\_in\_year, check\_out\_year, fee)

**Accounts table:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno** | **Attributes** | **Datatype** | **Constraints** |
| 1 | Reservation\_id | Int | Primary key |
| 2 | Student\_id | Int | Foreign key |
| 3 | Hostel\_id | Int | Foreign key |
| 4 | Room\_no | Int | Foreign key |
| 5 | Check\_in\_year | Int | Not null |
| 6 | Check\_out\_year | Int |  |
| 7 | fee | Int | Not null |

1. worker (worker\_id, name, hostel\_id, salary, gender, city, mobile, designation)

**Worker table:**

|  |  |  |  |
| --- | --- | --- | --- |
| Sno | Attributes | Datatype | Constraint |
| 1 | Worker\_id | Int | Primary key |
| 2 | Name | Varchar(20) | Not null |
| 3 | Hostel\_id | Int | Foreign key |
| 4 | Salary | Int | Not null |
| 5 | Gender | Char(1) | Not null check(gender='f' or gender='m') |
| 6 | City | Varchar(20) | Not null |
| 7 | Mobile | Varchar(10) | Not null |
| 8 | Designation | Varchar(20) | Not null |

1. payment (payment\_id, student\_id, amount, year, fee\_due)

**Payment table:**

|  |  |  |  |
| --- | --- | --- | --- |
| Sno | Attributes | Datatype | Constraint |
| 1 | Payment\_id | Int | Primary key |
| 2 | Student\_id | Int | Foreign key |
| 3 | Amount | Int | Not null |
| 4 | Year | Int | Not null |
| 5 | Fee due | Int | Not null |