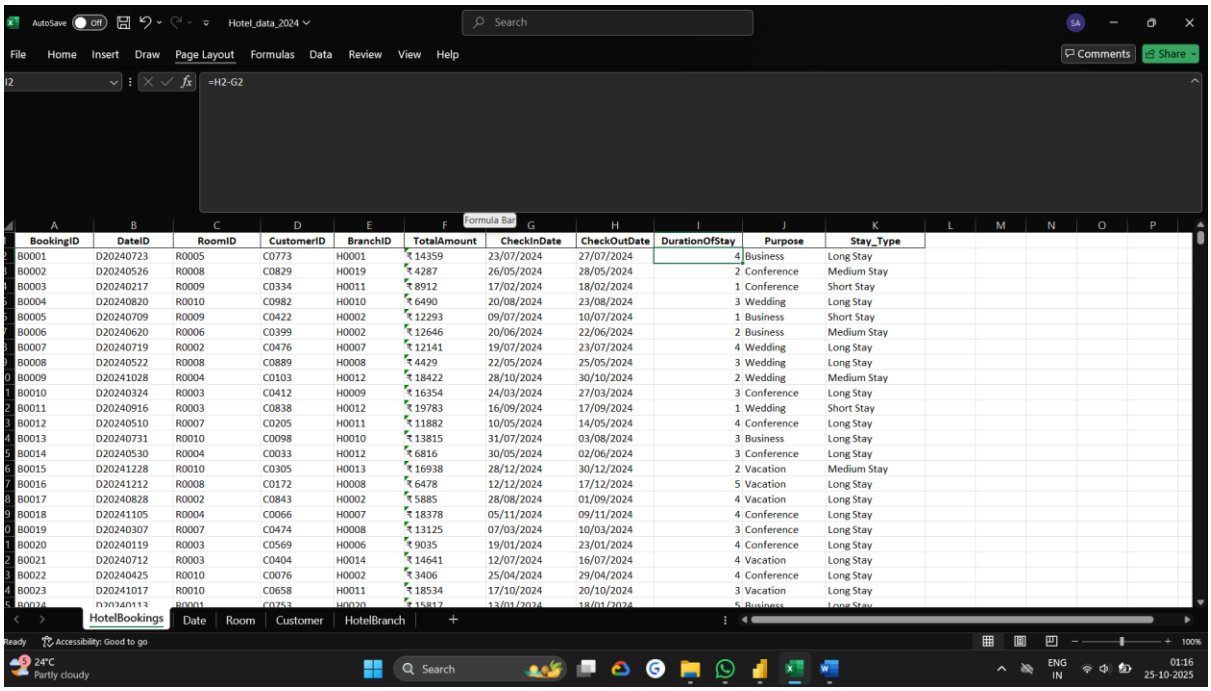
1. Duration of Stay
   =H2 - G2 i.e. CheckOutDate – CheckInDate




| BookingID | DateID | RoomID | CustomerID | BranchID | TotalAmount | CheckInDate | CheckOutDate | DurationOfStay | Purpose | Stay_Type |
|---|---|---|---|---|---|---|---|---|---|---|
| B0001 | D20240723 | R0005 | C0773 | H0001 | ₹14359 | 23/07/2024 | 27/07/2024 | 4 | Business | Long Stay |
| B0002 | D20240526 | R0008 | C0829 | H0019 | ₹4287 | 26/05/2024 | 28/05/2024 | 2 | Conference | Medium Stay |
| B0003 | D20240217 | R0009 | C0334 | H0011 | ₹8912 | 17/02/2024 | 18/02/2024 | 1 | Conference | Short Stay |
| B0004 | D20240820 | R0010 | C0982 | H0010 | ₹6490 | 20/08/2024 | 23/08/2024 | 3 | Wedding | Long Stay |
| B0005 | D20240709 | R0009 | C0422 | H0002 | ₹12293 | 09/07/2024 | 10/07/2024 | 1 | Business | Short Stay |
| B0006 | D20240620 | R0006 | C0399 | H0002 | ₹12646 | 20/06/2024 | 22/06/2024 | 2 | Business | Medium Stay |
| B0007 | D20240719 | R0002 | C0476 | H0007 | ₹12141 | 19/07/2024 | 23/07/2024 | 4 | Wedding | Long Stay |
| B0008 | D20240522 | R0008 | C0889 | H0008 | ₹4429 | 22/05/2024 | 25/05/2024 | 3 | Wedding | Long Stay |
| B0009 | D20241028 | R0004 | C0103 | H0012 | ₹18422 | 28/10/2024 | 30/10/2024 | 2 | Wedding | Medium Stay |
| B0010 | D20240324 | R0003 | C0412 | H0009 | ₹16354 | 24/03/2024 | 27/03/2024 | 3 | Conference | Long Stay |
| B0011 | D20240916 | R0003 | C0838 | H0012 | ₹19783 | 16/09/2024 | 17/09/2024 | 1 | Wedding | Short Stay |
| B0012 | D20240510 | R0007 | C0205 | H0011 | ₹11882 | 10/05/2024 | 14/05/2024 | 4 | Conference | Long Stay |
| B0013 | D20240731 | R0010 | C0098 | H0010 | ₹13815 | 31/07/2024 | 03/08/2024 | 3 | Business | Long Stay |
| B0014 | D20240530 | R0004 | C0033 | H0012 | ₹6816 | 30/05/2024 | 02/06/2024 | 3 | Conference | Long Stay |
| B0015 | D20241228 | R0010 | C0305 | H0013 | ₹16938 | 28/12/2024 | 30/12/2024 | 2 | Vacation | Medium Stay |
| B0016 | D20241212 | R0008 | C0172 | H0008 | ₹6478 | 12/12/2024 | 17/12/2024 | 5 | Vacation | Long Stay |
| B0017 | D20240828 | R0002 | C0843 | H0002 | ₹5885 | 28/08/2024 | 01/09/2024 | 4 | Vacation | Long Stay |
| B0018 | D20241105 | R0004 | C0066 | H0007 | ₹18378 | 05/11/2024 | 09/11/2024 | 4 | Conference | Long Stay |
| B0019 | D20240307 | R0007 | C0474 | H0008 | ₹13125 | 07/03/2024 | 10/03/2024 | 3 | Conference | Long Stay |
| B0020 | D20240119 | R0003 | C0569 | H0006 | ₹9035 | 19/01/2024 | 23/01/2024 | 4 | Conference | Long Stay |
| B0021 | D20240712 | R0003 | C0404 | H0014 | ₹14641 | 12/07/2024 | 16/07/2024 | 4 | Vacation | Long Stay |
| B0022 | D20240425 | R0010 | C0076 | H0002 | ₹3406 | 25/04/2024 | 29/04/2024 | 4 | Conference | Long Stay |
| B0023 | D20241017 | R0010 | C0658 | H0011 | ₹18534 | 17/10/2024 | 20/10/2024 | 3 | Vacation | Long Stay |
| B0024 | D20240113 | R0001 | C0753 | H0020 | ₹15817 | 13/01/2024 | 18/01/2024 | 5 | Business | Long Stay |

**2. Stay Type**

**=SWITCH(TRIM(UPPER(J2)),**

**"BUSINESS", "Short Stay",**

**"CONFERENCE", "Medium Stay",**

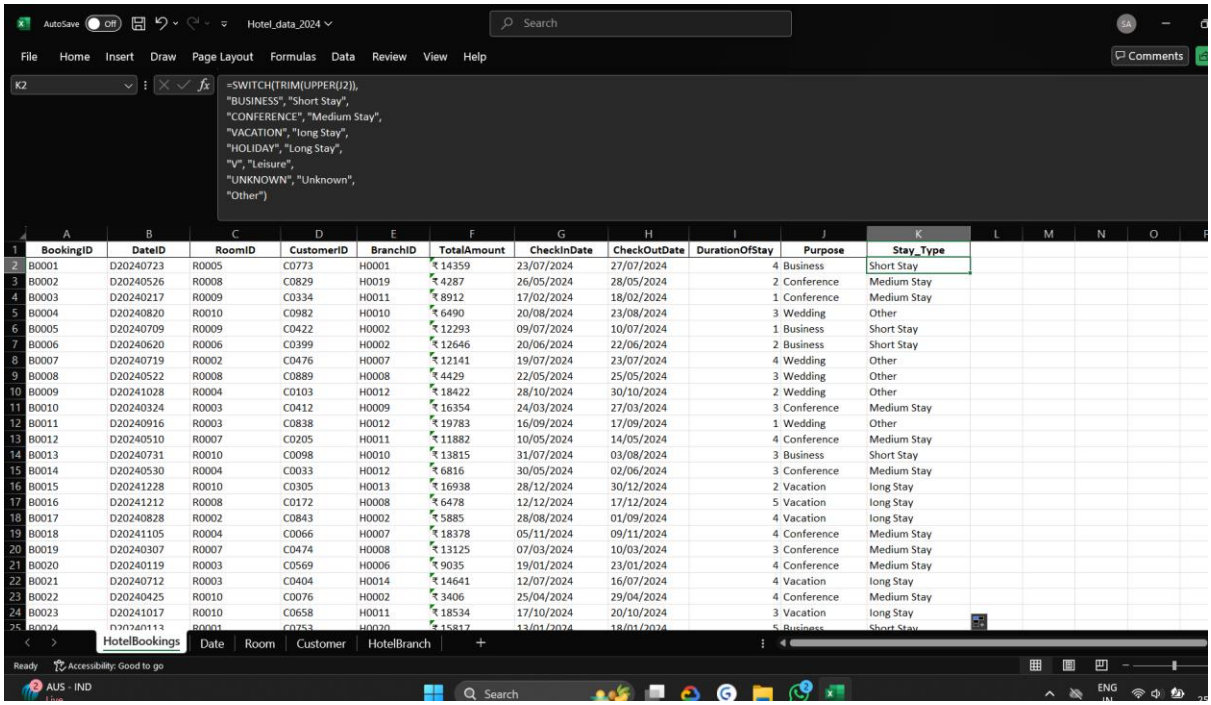
**"VACATION", "long Stay",**

**"HOLIDAY", "Long Stay",**

**"V", "Leisure",**

**"UNKNOWN", "Unknown",**

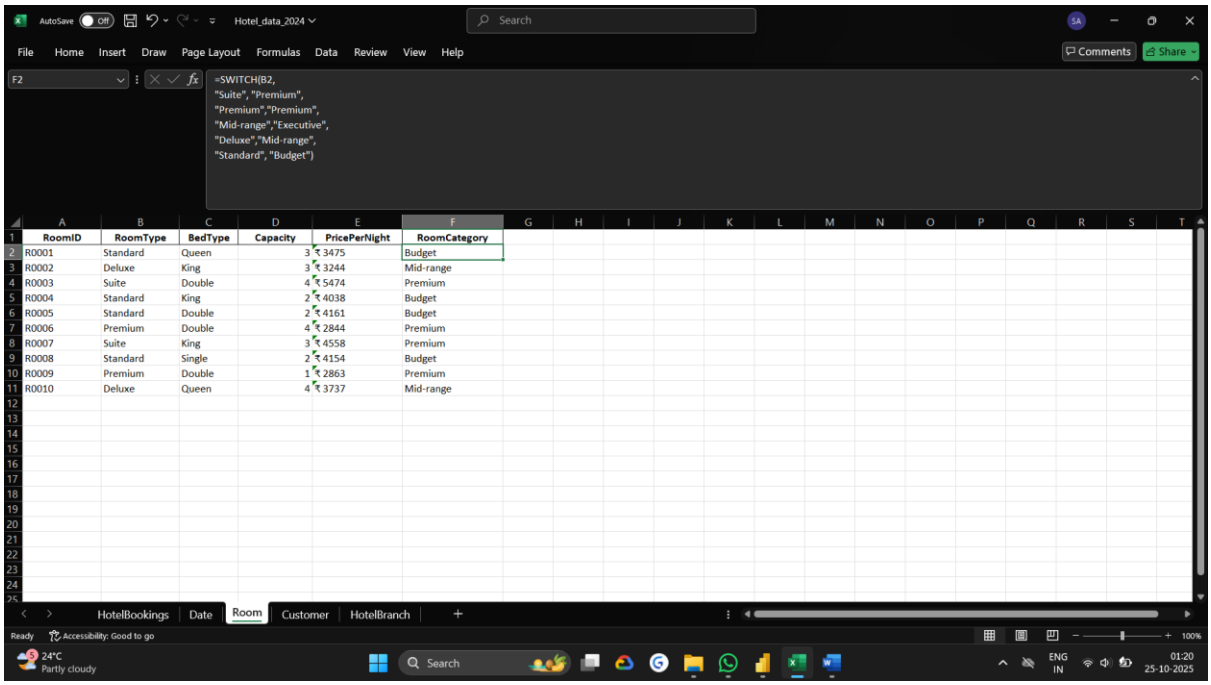
**"Other")**




| BookingID | DateID | RoomID | CustomerID | BranchID | TotalAmount | CheckInDate | CheckOutDate | DurationOfStay | Purpose | Stay_Type |
|---|---|---|---|---|---|---|---|---|---|---|
| B0001 | D20240723 | R0005 | C0773 | H0001 | ₹14359 | 23/07/2024 | 27/07/2024 | 4 | Business | Short Stay |
| B0002 | D20240526 | R0008 | C0829 | H0019 | ₹4287 | 26/05/2024 | 28/05/2024 | 2 | Conference | Medium Stay |
| B0003 | D20240217 | R0009 | C0334 | H0011 | ₹8912 | 17/02/2024 | 18/02/2024 | 1 | Conference | Medium Stay |
| B0004 | D20240820 | R0010 | C0982 | H0010 | ₹6490 | 20/08/2024 | 23/08/2024 | 3 | Wedding | Other |
| B0005 | D20240709 | R0009 | C0422 | H0002 | ₹12293 | 09/07/2024 | 10/07/2024 | 1 | Business | Short Stay |
| B0006 | D20240620 | R0006 | C0399 | H0002 | ₹12646 | 20/06/2024 | 22/06/2024 | 2 | Business | Short Stay |
| B0007 | D20240719 | R0002 | C0476 | H0007 | ₹12141 | 19/07/2024 | 23/07/2024 | 4 | Wedding | Other |
| B0008 | D20240522 | R0008 | C0889 | H0008 | ₹4429 | 22/05/2024 | 25/05/2024 | 3 | Wedding | Other |
| B0009 | D20241028 | R0004 | C0103 | H0012 | ₹18422 | 28/10/2024 | 30/10/2024 | 2 | Wedding | Other |
| B0010 | D20240324 | R0003 | C0412 | H0009 | ₹16354 | 24/03/2024 | 27/03/2024 | 3 | Conference | Medium Stay |
| B0011 | D20240916 | R0003 | C0838 | H0012 | ₹19783 | 16/09/2024 | 17/09/2024 | 1 | Wedding | Other |
| B0012 | D20240510 | R0007 | C0205 | H0011 | ₹11882 | 10/05/2024 | 14/05/2024 | 4 | Conference | Medium Stay |
| B0013 | D20240731 | R0010 | C0098 | H0010 | ₹13815 | 31/07/2024 | 03/08/2024 | 3 | Business | Short Stay |
| B0014 | D20240530 | R0004 | C0033 | H0012 | ₹6816 | 30/05/2024 | 02/06/2024 | 3 | Conference | Medium Stay |
| B0015 | D20241228 | R0010 | C0305 | H0013 | ₹16938 | 28/12/2024 | 30/12/2024 | 2 | Vacation | long Stay |
| B0016 | D20241212 | R0008 | C0172 | H0008 | ₹6478 | 12/12/2024 | 17/12/2024 | 5 | Vacation | long Stay |
| B0017 | D20240828 | R0002 | C0843 | H0002 | ₹5885 | 28/08/2024 | 01/09/2024 | 4 | Vacation | long Stay |
| B0018 | D20241105 | R0004 | C0066 | H0007 | ₹18378 | 05/11/2024 | 09/11/2024 | 4 | Conference | Medium Stay |
| B0019 | D20240307 | R0007 | C0474 | H0008 | ₹13125 | 07/03/2024 | 10/03/2024 | 3 | Conference | Medium Stay |
| B0020 | D20240119 | R0003 | C0569 | H0006 | ₹9035 | 19/01/2024 | 23/01/2024 | 4 | Conference | Medium Stay |
| B0021 | D20240712 | R0003 | C0404 | H0014 | ₹14641 | 12/07/2024 | 16/07/2024 | 4 | Vacation | long Stay |
| B0022 | D20240425 | R0010 | C0076 | H0002 | ₹3406 | 25/04/2024 | 29/04/2024 | 4 | Conference | Medium Stay |
| B0023 | D20241017 | R0010 | C0658 | H0011 | ₹18534 | 17/10/2024 | 20/10/2024 | 3 | Vacation | long Stay |

3. **Room Category:**

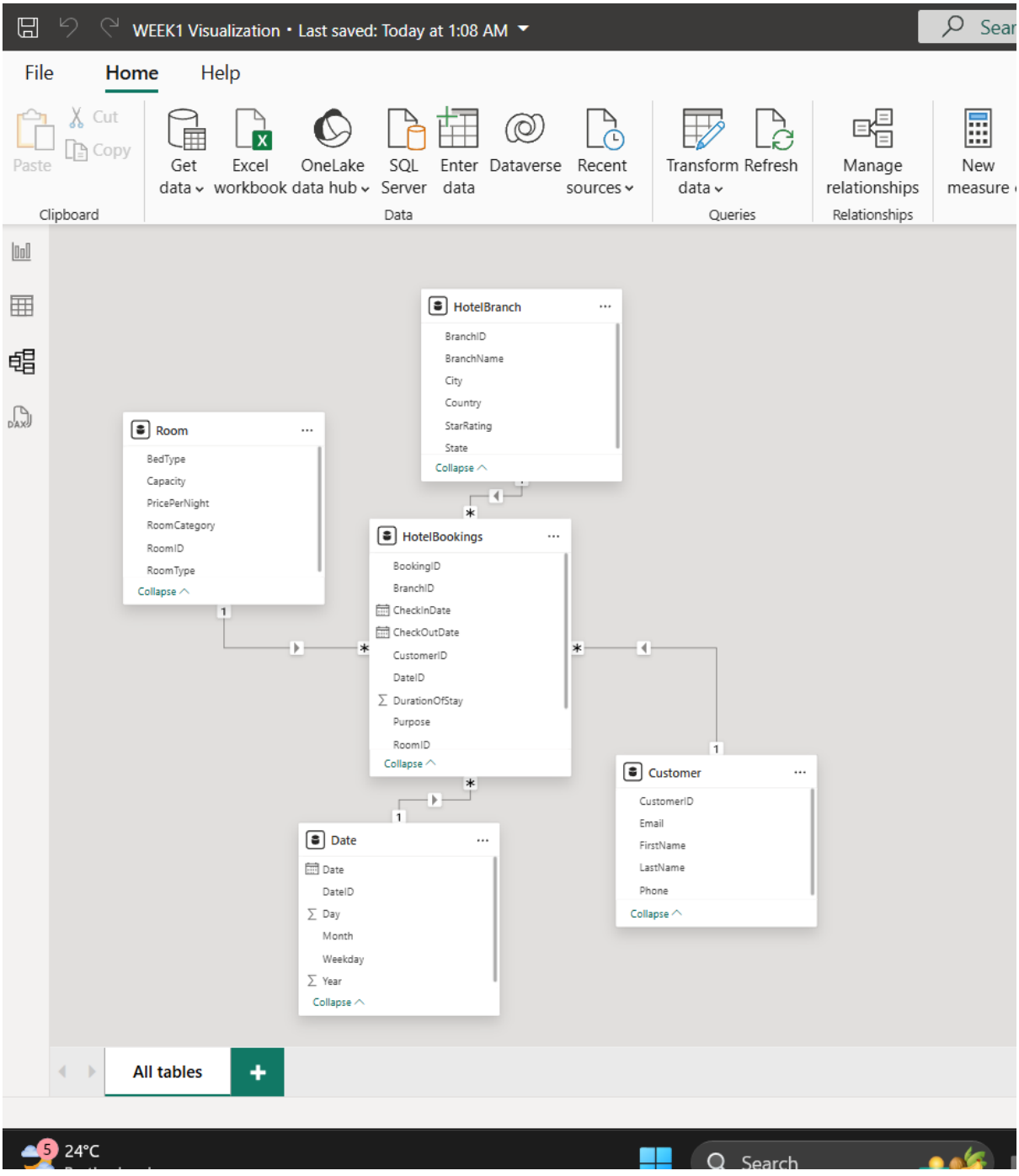
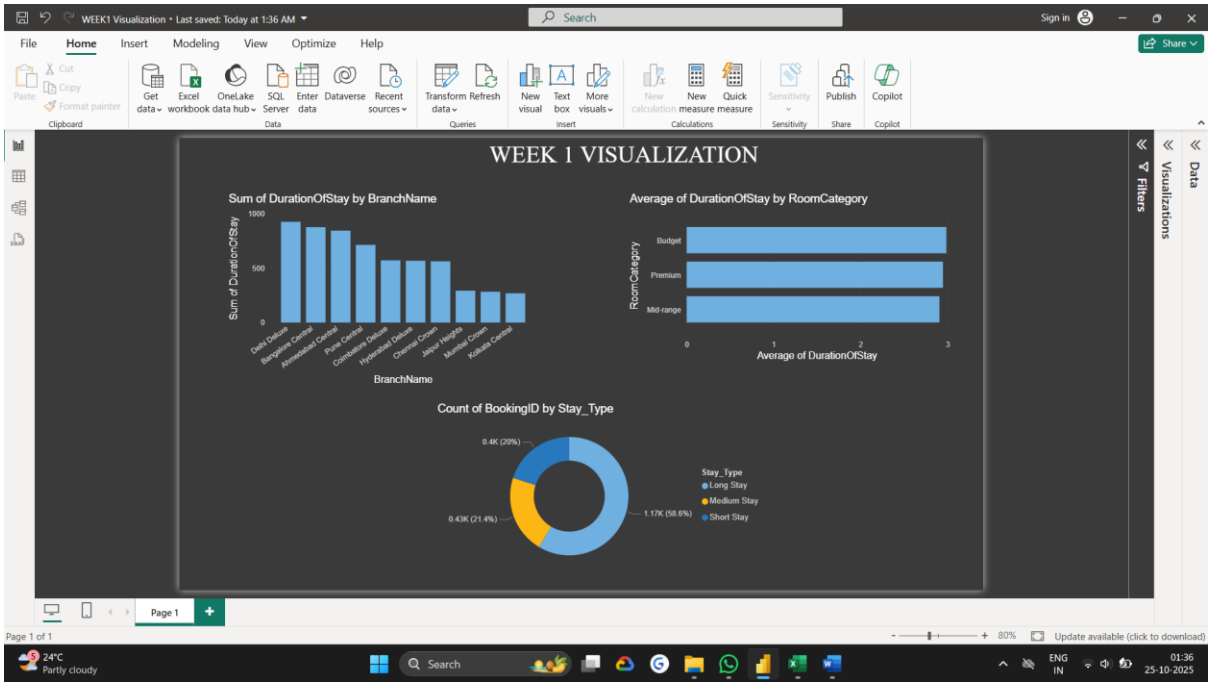
```
=SWITCH(B2,
"Suite", "Premium",
"Premium", "Premium",
"Deluxe", "Mid-range",
"Executive", "Mid-range",
"Standard", "Budget")
```




| RoomID | RoomType | BedType | Capacity | PricePerNight | RoomCategory |
|---|---|---|---|---|---|
| R0001 | Standard | Queen | 3 | ₹3475 | Budget |
| R0002 | Deluxe | King | 3 | ₹3244 | Mid-range |
| R0003 | Suite | Double | 4 | ₹5474 | Premium |
| R0004 | Standard | King | 2 | ₹4038 | Budget |
| R0005 | Standard | Double | 2 | ₹4161 | Budget |
| R0006 | Premium | Double | 4 | ₹2844 | Premium |
| R0007 | Suite | King | 3 | ₹4558 | Premium |
| R0008 | Standard | Single | 2 | ₹4154 | Budget |
| R0009 | Premium | Double | 1 | ₹2863 | Premium |
| R0010 | Deluxe | Queen | 4 | ₹3737 | Mid-range |

**Data Modeling:**

**Entity-Relationship Diagram:**



VISUALISATION