Product Table

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Size | Constraints |
| Product\_id | Int | 5 | Primary key  Auto\_increment |
| Name | Varchar | 100 | Not null |
| Category\_id | Int | 5 | Foreign key on delete cascade on update cascade |
| Weight | Int | 5 | Not null |
| Price | Int | 5 | Not null |

Category Table

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Size | Constraints |
| Category\_id | Int | 5 | Primary key  Auto\_increment |
| Name | Varchar | 100 | Not null |

Customer Table

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Size | Constraints |
| Customer\_id | Int | 5 | Primary Key  Auto\_increment |
| Name | Varchar | 100 | Not null |
| Password | Varchar | 100 | Not null |
| Contact | Varchar | 100 | Not null |

Order Table

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Size | Constraints |
| Customer\_id | Int | 5 | Foreign key on delete cascade on update cascade |
| Product\_id | Int | 5 | Foreign key on delete cascade on update cascade |
| Order\_date | Date |  | Not null |

Admin Table

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Size | Constraints |
| Admin\_int | Int | 5 | Primary Key  Auto\_increment |
| Name | Varchar | 100 | Not null |
| Password | Varchar | 100 | Not null |
| Contact | Varchar | 100 | Not null |

Project Table

|  |  |
| --- | --- |
| Packeage | Class Name |
| Product.client | ProductPriceApp(main) |
| Product.Model | ProductModel  CategoryModel  WeightPriceModel  CustomerModel  OrderModel  Order\_itemsModel |
| Product.Services | ProductService  CategoryService  WeightPriceService  CustomerService  OrderService |
| Product.Repo | ProductRep  CategoryRep  WeightRep  CustomerRep  OrderRep  DBConfigRep |
| Product.Config | DBConfig  PathHelper |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Weight  (x)  In kg | Price  (y) | Mean  (x) | Mean  (y) | Deviation  Of X | Deviation  Of Y | Product  Of  Deviation | Sum of  Product  Of  Deviation | Square of  Deviation of X |
| 1 | 10 |  |  | -1 | -10 | 10 |  | 1 |
| 2 | 20 | 2 | 20 | 0 | 0 | 0 | 20 | 0 |
| 3 | 30 |  |  | 1 | 10 | 10 |  | 1 |
| 4 | ? |  |  |  |  |  |  |  |

M=Sum of product of deviation/Sum of square of deviation for x

M=20/2=10

B=Mean of y-(m\*mean of x)

B=20-(10\*2) = 0

Y=mx+b (x is prediction weight)

Y=10\*4+0= 40

This is the prediction price of 4 kg weight.