**Entity Relationship Diagram:**

A diagram of a partner

AI-generated content may be incorrect.

**Relational Database Schema:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Relation** | **Attributes** | **Data type** | **Comment** |
| **PARTNERTYPE** | PartnerTypeID | CHAR(2) | Primary Key, e.g., ‘PO’, ‘PR’ |
| Description | VARCHAR(30) | e.g., ‘Producer only’, ‘Producer and retailer’ |
| **PARTNER** | PartnerID | INT | Primary Key, Auto Increase |
| Name | VARCHAR(50) |  |
| TypeID | CHAR(2) | Foreign key reference PARTNERTYPE (PartnerTypeID) |
| Phone | CHAR(10) | e.g., ‘0889300300’ |
| StreetNo | VARCHAR(5) | e.g., ‘100’, ‘1/102’ |
| StreetName | VARCHAR(40) |  |
| City | VARCHAR(30) |  |
| State | VARCHAR(3) | e.g., ‘NT’, ‘QLD’ |
| Postcode | CHAR(4) | e.g., ‘3810’ |
| **PARTNERSHIP** | PartnershipID | INT | Primary Key, Auto Increase |
| StartDate | DATE | Format: DD-MM-YYYY |
| Totalinvestment | DECIMAL(10,2) | e.g., 5,546,000.00 (in dollars) |
| **PARTNERPARTNERSHIP** | PartnerPartnershipID | INT | Primary Key, Auto Increase |
| PartnerID | INT | Foreign key reference PARTNER(PartnerID) |
| PartnershipID | INT | Foreign key reference PARTNERSHIP(PartnershipID) |
| PartnerInvShare | DECIMAL(10,2) | e.g., 2,029,009.50 (in dollars) |
| PartnerSaleShare | DECIMAL(5,2) | e.g., 70.05 (in percentage) |
| **PRODUCTTYPE** | ProductTypeID | CHAR(3) | Primary Key, e.g., ‘WSP’ |
| Description | VARCHAR(50) | ‘Water – sparkling’ |
| **SOURCETYPE** | SourceTypeID | INT | Primary Key, Auto Increase |
| Description | VARCHAR(40) | ‘Palmerston Dolostone aquifer’ |
| **PACKAGINGTYPE** | PackageTypeID | CHAR(3) | Primary Key, ‘GOS’ |
| Description | VARCHAR(60) | ‘Glass bottle with cork cap (single)’ |
| **PRODUCT** | ProductNo | INT | Primary Key, Auto Increase |
| Name | VARCHAR(40) | ‘Akuna Springs’ |
| Description | VARCHAR(70) | ‘Premium spring water’ |
| ProdTypeID | CHAR(3) | Foreign key reference PRODUCTTYPE(ProductTypeID) |
| SrcTypeID | INT | Foreign key reference SOURCETYPE(SourceTypeID) |
| PackTypeID | CHAR(3) | Foreign key reference PACKAGINGTYPE(PackageTypeID) |
| Ingredients | VARCHAR(200) | ‘Australian spring water (100%)’ |
| Amount | VARCHAR(10) | ‘750 ml’ |
| Price | DECIMAL(5,2) | 9.99 (in dollars) |
| **PARTNERSHIPPRODUCT** | PartnershipProductID | INT | Primary Key, Auto Increase |
| ProductNo | INT | Foreign key reference PRODUCT(ProductNo) |
| PartnershipID | INT | Foreign key reference PARTNERSHIP(PartnershipID) |
| TotalUnitAgreed | INT | e.g., 5000 |
| TotalUnitDelivered | INT | e.g., 1550 |

**The Input Data:**

Table: **PARTNERTYPE**

|  |  |
| --- | --- |
| **PartnerTypeID** | **Description** |
| PO | Producer only |
| SO | Supplier only |
| RO | Retailer only |
| PR | Producer and retailer |
| SR | Supplier and retailer |

Table: **PARTNER**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PartnerID** | **Name** | **TypeID** | **Phone** | **StreetNo** | **StreetName** | **City** | **State** | **Postcode** |
| 1 | Refresh Darwin | SO | 0882869887 | 10 | Fame St | Alawa | NT | 0810 |
| 2 | ALTD Spirits | PR | 0290899663 | 45 | Maple Cres | Rockdale | NSW | 2500 |
| 3 | OzHarvest | PR | 0798933988 | 140 | Rubicon Rd | Sunnybank | QLD | 4111 |
| 4 | Coles | RO | 0392882777 | 170 | Dunnings St | Footscray | Vic | 3842 |
| 5 | First Nations-owned company | SR | 0878478721 | 90 | Bay St | Darwin City | NT | 0800 |

Table: **PARTNERSHIP**

|  |  |  |
| --- | --- | --- |
| **PartnershipID** | **StartDate** | **Totalinvestment** |
| 1 | 13-02-2018 | $20,000 |
| 2 | 22-10-2021 | $22,500 |
| 3 | 13-03-2022 | $30,000 |
| 4 | 12-04-2024 | $25,000 |
| 5 | 13-05-2025 | $35,000 |

Table: **PARTNERPARTNERSHIP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PartnerPartnershipID** | **PartnerID** | **PartnershipID** | **PartnerInvShare** | **PartnerSaleShare** |
| 1 | 1 | 1 | $10,000 | 75.00 |
| 2 | 2 | 2 | $11,000 | 82.00 |
| 3 | 2 | 3 | $12,000 | 35.20 |
| 4 | 4 | 4 | $15,000 | 40.00 |
| 5 | 5 | 5 | $25,000 | 65.00 |
| 6 | 3 | 3 | $10,000 | 45.00 |

Table: **PRODUCTTYPE**

|  |  |
| --- | --- |
| **ProductTypeID** | **Description** |
| WSP | Water – sparkling |
| WST | Water – still |
| SNT | Spirit – non-alcoholic, still |
| SNP | Spirit – non-alcoholic, sparkling |
| WNA | Wine – non-alcoholic |
| WNC | Wine – non-alcoholic, carbonated |
| SLT | Spirit – limited edition, still |
| SLP | Spirit – limited edition, sparkling |
| SLC | Spirit – limited edition, carbonated |

Table: **SOURCETYPE**

|  |  |
| --- | --- |
| **SourceTypeID** | **Description** |
| 1 | Palmerston Dolostone aquifer |
| 2 | Kakadu National Park |
| 3 | Wild-harvested native botanicals |
| 4 | Capricorn Coast aquifer |
| 5 | Yarra Ranges aquifer |

Table: **PACKAGINGTYPE**

|  |  |
| --- | --- |
| **PackageTypeID** | **Description** |
| GOS | Glass bottle with cork cap (single) |
| GRS | Glass bottle with crown cap (single) |
| PPS | Plastic bottle with polyethylene cap (single) |
| GOP | Glass bottle with cork cap (pack of 6) |
| GRP | Glass bottle with crown cap (pack of 6) |
| PPP | Plastic bottle with polyethylene cap (pack of 6) |

Table: **PRODUCT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ProductNo** | **Name** | **Description** | **ProdTypeID** | **SrcTypeID** | **PackTypeID** | **Ingredients** | **Amount** | **Price** |
| 1 | Akuna Springs | Mineral-rich spring water | WSP | 1 | GOS | Spring water, lightly carbonated | 600ml | $4.99 |
| 2 | Akuna Springs | Mineral-rich spring water | WST | 4 | GOS | Spring water | 600ml | $4.99 |
| 3 | Akuna Springs | Mineral-rich spring water | WSP | 5 | GRS | Spring water, lightly carbonated | 600ml | $4.49 |
| 4 | Akuna Springs | Mineral-rich spring water | WST | 1 | GRS | Spring water | 600ml | $4.49 |
| 5 | Akuna Springs | Mineral-rich spring water | WST | 4 | PPS | Spring water | 600ml | $3.49 |
| 6 | Akuna Springs | Mineral-rich spring water | WSP | 1 | GOP | Spring water, lightly carbonated | 3,600ml | $28.99 |
| 7 | Akuna Springs | Mineral-rich spring water | WST | 4 | GOP | Spring water | 3,600ml | $28.99 |
| 8 | Akuna Springs | Mineral-rich spring water | WSP | 5 | GRP | Spring water, lightly carbonated | 3,600ml | $24.49 |
| 9 | Akuna Springs | Mineral-rich spring water | WST | 1 | GRP | Spring water | 3,600ml | $24.49 |
| 10 | Akuna Springs | Mineral-rich spring water | WST | 4 | PPP | Spring water | 3,600ml | $18.49 |
| 11 | Akuna Blue | Premium spring water | WSP | 1 | GOS | Spring water, lightly carbonated | 600ml | $5.99 |
| 12 | Akuna Blue | Premium spring water | WST | 4 | GOS | Spring water | 600ml | $5.99 |
| 13 | Akuna Blue | Premium spring water | WSP | 5 | GRS | Spring water, lightly carbonated | 600ml | $5.49 |
| 14 | Akuna Blue | Premium spring water | WST | 1 | GRS | Spring water | 600ml | $5.49 |
| 15 | Akuna Blue | Premium spring water | WST | 4 | PPS | Spring water | 600ml | $4.49 |
| 16 | Akuna Blue | Premium spring water | WSP | 1 | GOP | Spring water, lightly carbonated | 3,600ml | $34.99 |
| 17 | Akuna Blue | Premium spring water | WST | 4 | GOP | Spring water | 3,600ml | $34.99 |
| 18 | Akuna Blue | Premium spring water | WSP | 5 | GRP | Spring water, lightly carbonated | 3,600ml | $30.49 |
| 19 | Akuna Blue | Premium spring water | WST | 1 | GRP | Spring water | 3,600ml | $30.49 |
| 20 | Akuna Blue | Premium spring water | WST | 4 | PPP | Spring water | 3,600ml | $25.49 |
| 21 | Kakadu An-marabula Bellini | Native Peach Bellini, non-alcoholic spirit alternative | SNT | 2 | GOS | Native peach nectar, botanical extracts, dealcoholized wine, natural flavours, colours, sparkling water, citric acid, vegetable glycerine, potassium sorbate and sugar | 750ml | $10.99 |
| 22 | Kakadu An-marabula Bellini | Native Peach Bellini, non-alcoholic spirit alternative | SNT | 2 | GOP | Native peach nectar, botanical extracts, dealcoholized wine, natural flavours, colours, sparkling water, citric acid, vegetable glycerine, potassium sorbate and sugar | 4,500ml | $61.99 |
| 23 | Kakadu Kitchen x OzHarvest Conscious Drink | Conscious Drink, non-alcoholic wine alternative | WNA | 3 | GOS | Ethically sourced: filtered water, blueberry juice, lemongrass, saltbush, pepper berry, vinegar, botanical extracts, natural flavours, agave, citric acid, and potassium sorbate | 750ml | $18.49 |
| 24 | Kakadu Kitchen x OzHarvest Conscious Drink | Conscious Drink, non-alcoholic wine alternative | WNC | 3 | GOS | Ethically sourced: filtered water, blueberry juice, lemongrass, saltbush, pepper berry, vinegar, botanical extracts, natural flavours, agave, citric acid, potassium sorbate, and lightly carbonated | 750ml | $18.99 |
| 25 | Kakadu Kitchen x OzHarvest Conscious Drink | Conscious Drink, non-alcoholic wine alternative | WNA | 3 | GOP | Ethically sourced: filtered water, blueberry juice, lemongrass, saltbush, pepper berry, vinegar, botanical extracts, natural flavours, agave, citric acid, and potassium sorbate | 4,500ml | $110.49 |
| 26 | Kakadu Kitchen x OzHarvest Conscious Drink | Conscious Drink, non-alcoholic wine alternative | WNC | 3 | GOP | Ethically sourced: filtered water, blueberry juice, lemongrass, saltbush, pepper berry, vinegar, botanical extracts, natural flavours, agave, citric acid, potassium sorbate, and lightly carbonated | 4,500ml | $113.99 |
| 27 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLT | 2 | GRS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, and potassium sorbate | 600ml | $39.99 |
| 28 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLP | 2 | GRS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, and potassium sorbate | 750ml | $45.99 |
| 29 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLC | 2 | GRS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, and potassium sorbate | 500ml | $35.99 |
| 30 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLT | 2 | GOS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, native sugar cane "djilidjilih", and potassium sorbate | 600ml | $39.99 |
| 31 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLP | 2 | GOS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, native sugar cane "djilidjilih", and potassium sorbate | 750ml | $45.99 |
| 32 | ALTD x Kakadu Kaboh (Green Ant) G&T | Ready-to-drink (RTD) beverage | SLC | 2 | GOS | Distilled juniper, handcrafted bitters, black pepper, green ants, botanical extracts, natural flavours, citric acid, vegetable glycerine, native sugar cane "djilidjilih", and potassium sorbate | 500ml | $35.99 |
| 33 | Kakadu An-marabula Bellini | Native Peach Bellini, non-alcoholic spirit alternative | SNP | 2 | GOS | Native peach nectar, botanical extracts, dealcoholized wine, natural flavours, colours, sparkling water, citric acid, vegetable glycerine, potassium sorbate and sugar | 750ml | $12.99 |
| 34 | Kakadu An-marabula Bellini | Native Peach Bellini, non-alcoholic spirit alternative | SNP | 2 | GOP | Native peach nectar, botanical extracts, dealcoholized wine, natural flavours, colours, sparkling water, citric acid, vegetable glycerine, potassium sorbate and sugar | 4,500ml | $66.99 |

Table: **PARTNERSHIPPRODUCT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PartnershipProductID** | **ProductNo** | **PartnershipID** | **TotalUnitAgreed** | **TotalUnitDelivered** |
| 1 | 1 | 1 | 100,000 | 33,335 |
| 2 | 2 | 1 | 100,000 | 24,444 |
| 3 | 3 | 1 | 130,000 | 24,000 |
| 4 | 4 | 1 | 240,000 | 36,000 |
| 5 | 5 | 1 | 134,000 | 34,000 |
| 6 | 6 | 1 | 50,000 | 4,000 |
| 7 | 7 | 1 | 20,000 | 6,000 |
| 8 | 8 | 1 | 30,000 | 4,000 |
| 9 | 9 | 1 | 37,000 | 6,000 |
| 10 | 10 | 1 | 48,000 | 4,000 |
| 11 | 11 | 1 | 100,000 | 33,335 |
| 12 | 12 | 1 | 100,000 | 34,444 |
| 13 | 13 | 1 | 130,000 | 44,000 |
| 14 | 14 | 1 | 240,000 | 76,000 |
| 15 | 15 | 1 | 134,000 | 44,000 |
| 16 | 16 | 1 | 50,000 | 5,000 |
| 17 | 17 | 1 | 20,000 | 6,000 |
| 18 | 18 | 1 | 30,000 | 5,000 |
| 19 | 19 | 1 | 37,000 | 6,000 |
| 20 | 20 | 1 | 48,000 | 5,000 |
| 21 | 9 | 2 | 18,000 | 4,000 |
| 22 | 10 | 2 | 30,000 | 13,335 |
| 23 | 11 | 3 | 110,000 | 34,000 |
| 24 | 12 | 3 | 70,000 | 15,000 |
| 25 | 21 | 2 | 30,000 | 10,000 |
| 26 | 22 | 2 | 25,000 | 8,334 |
| 27 | 23 | 3 | 85,000 | 5,000 |
| 28 | 24 | 3 | 77,000 | 6,000 |
| 29 | 25 | 3 | 45,000 | 5,000 |
| 30 | 26 | 3 | 39,000 | 10,000 |
| 31 | 23 | 5 | 100,000 | 30,000 |
| 32 | 24 | 5 | 100,000 | 30,000 |
| 33 | 25 | 5 | 100,000 | 30,000 |
| 34 | 26 | 5 | 100,000 | 30,000 |
| 35 | 1 | NULL | 15,000 | 500 |
| 36 | 2 | NULL | 25,000 | 4,000 |
| 37 | 11 | NULL | 35,000 | 3,000 |
| 38 | 12 | NULL | 22,000 | 7,456 |
| 39 | 27 | 2 | 5,000 | 2,000 |
| 40 | 28 | 2 | 6,000 | 0 |
| 41 | 29 | 2 | 7,000 | 0 |
| 42 | 30 | 2 | 8,000 | 0 |
| 43 | 31 | 2 | 9,000 | 0 |
| 44 | 32 | 2 | 10,000 | 0 |
| 45 | 33 | 2 | 20,000 | 0 |
| 46 | 34 | 2 | 15,000 | 0 |
| 47 | 16 | NULL | 5,000 | 0 |
| 48 | 17 | NULL | 2,000 | 0 |

**Note:** In PARTNERSHIPPRODUCT table, insert 0 in TotalUnitAgreed and TotalUnitDelivered columns when there are no unit agreed or delivered yet.