Harsha Mangnani
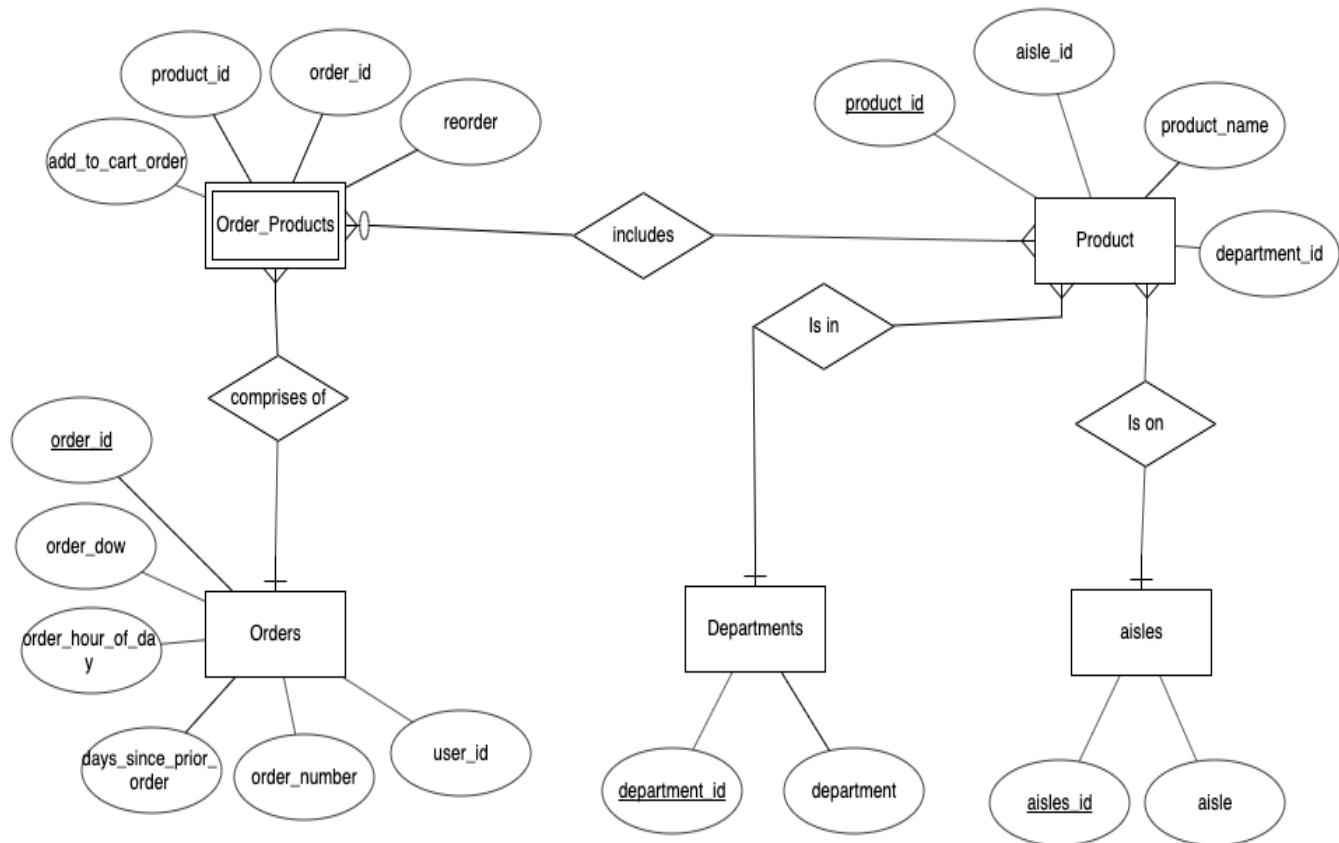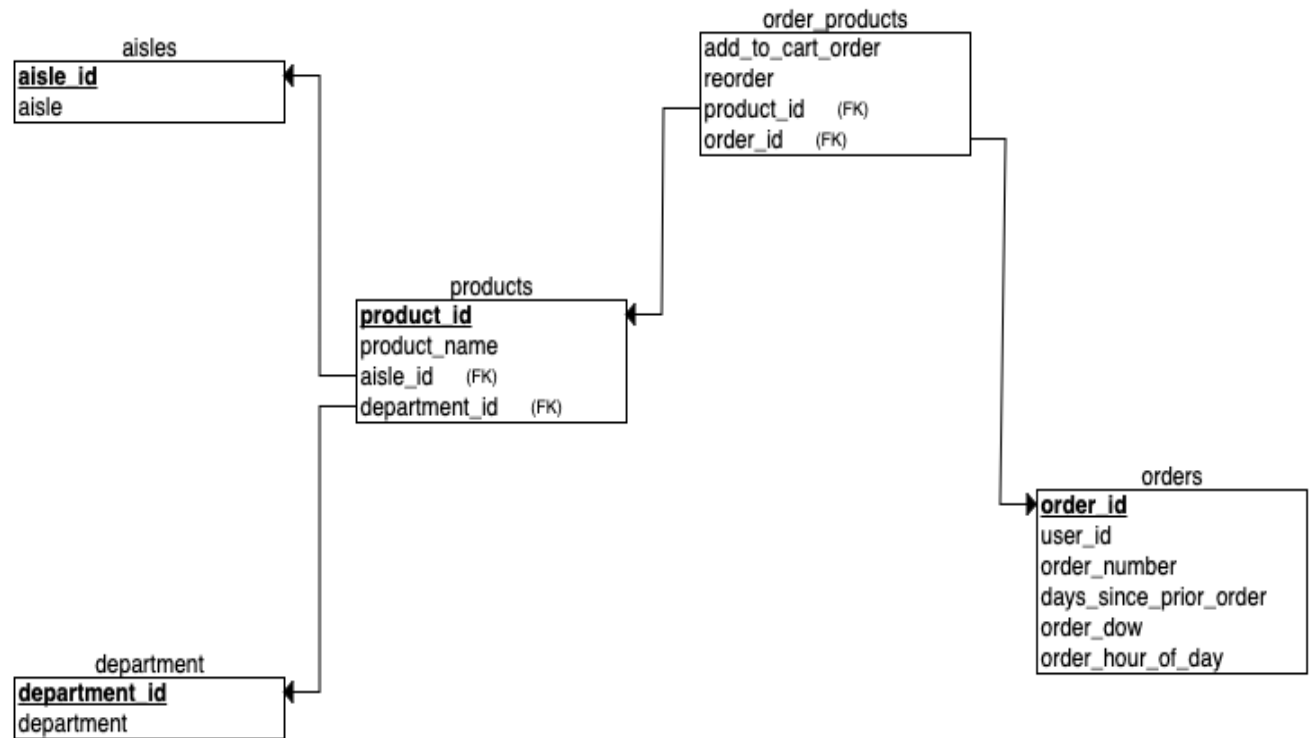Fatima AlSaadeh   Assignment #1   hm495, fya7

1- Build an ER model for the 5 Instacart tables (aisles, departments, products, orders, order_products) using ERDPlus (erdplus.com).

2- Convert the ER model to its corresponding Relational model using ERDPlus.

3- Convert the Relational model to its equivalent SQL scripts using ERDPlus.

```
CREATE TABLE department
(
  department_id INT NOT NULL,
  department VARCHAR NOT NULL,
  PRIMARY KEY (department_id)
);

CREATE TABLE aisles
(
  aisle_id INT NOT NULL,
  aisle VARCHAR NOT NULL,
  PRIMARY KEY (aisle_id)
);

CREATE TABLE orders
(
  order_id INT NOT NULL,
  user_id INT NOT NULL,
  order_number INT NOT NULL,
  days_since_prior_order INT NOT NULL,
  order_dow INT NOT NULL,
  order_hour_of_day INT NOT NULL,
  PRIMARY KEY (order_id)
);

CREATE TABLE products
(
  product_id INT NOT NULL,
  product_name VARCHAR NOT NULL,
  aisle_id INT NOT NULL,
  department_id INT NOT NULL,
  PRIMARY KEY (product_id),
  FOREIGN KEY (aisle_id) REFERENCES aisles(aisle_id),
  FOREIGN KEY (department_id) REFERENCES department(department_id)
);

CREATE TABLE order_products
(
  add_to_cart_order INT NOT NULL,
  reorder INT NOT NULL,
  product_id INT NOT NULL,
  order_id INT NOT NULL,
  FOREIGN KEY (product_id) REFERENCES products(product_id),
  FOREIGN KEY (order_id) REFERENCES orders(order_id)
);
```