

SQL PROJECT ON PIZZA SALES



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT  
    COUNT(ORDER_ID) AS TOTAL_ORDERS  
FROM  
    ORDERS;
```

| TOTAL_ORDERS |
|--------------|
| 21350 |

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

SELECT

```
ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),  
2) AS TOTAL_SALES
```

FROM

```
ORDER_DETAILS
```

JOIN

```
PIZZAS ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID
```

| TOTAL_SALES |
|-------------|
| 817860.05 |

IDENTIFY THE HIGHEST-PRICED PIZZA.

```
SELECT  
    PIZZA_TYPES.NAME, PIZZAS.PRICE  
FROM  
    PIZZA_TYPES  
        JOIN  
    PIZZAS ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID  
ORDER BY PIZZAS.PRICE DESC  
LIMIT 1;
```

| NAME | PRICE |
|-----------------|-------|
| The Greek Pizza | 35.95 |

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

SELECT

```
PIZZAS.SIZE,  
COUNT(ORDER_DETAILS.ORDER_DETAILS_ID) AS ORDER_COUNT
```

FROM

```
PIZZAS
```

JOIN

```
ORDER_DETAILS ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID
```

GROUP BY PIZZAS.SIZE

ORDER BY ORDER_COUNT **DESC**;

| SIZE | ORDER_COUNT |
|------|-------------|
| L | 18526 |
| M | 15385 |
| S | 14137 |
| XL | 544 |
| XXL | 28 |

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT  
    PIZZA_TYPES.NAME, SUM(ORDER_DETAILS.QUANTITY) AS QUANTITY  
FROM  
    PIZZA_TYPES  
        JOIN  
    PIZZAS ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID  
        JOIN  
    ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
GROUP BY PIZZA_TYPES.NAME  
ORDER BY QUANTITY DESC  
LIMIT 5;
```

| NAME | QUANTITY |
|----------------------------|----------|
| The Classic Deluxe Pizza | 2453 |
| The Barbecue Chicken Pizza | 2432 |
| The Hawaiian Pizza | 2422 |
| The Pepperoni Pizza | 2418 |
| The Thai Chicken Pizza | 2371 |

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT  
    PIZZA_TYPES.CATEGORY,  
    SUM(ORDER_DETAILS.QUANTITY) AS QUANTITY  
FROM  
    PIZZA_TYPES  
        JOIN  
    PIZZAS ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID  
        JOIN  
    ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
GROUP BY PIZZA_TYPES.CATEGORY  
ORDER BY QUANTITY DESC;
```

| CATEGORY | QUANTITY |
|----------|----------|
| Classic | 14888 |
| Supreme | 11987 |
| Veggie | 11649 |
| Chicken | 11050 |

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT  
    HOUR(ORDER_TIME) AS HOUR, COUNT(ORDER_ID) AS ORDER_COUNT  
FROM  
    ORDERS  
GROUP BY HOUR(ORDER_TIME);
```

| HOUR | ORDER_COUNT |
|------|-------------|
| 9 | 1 |
| 10 | 8 |
| 11 | 1231 |
| 12 | 2520 |
| 13 | 2455 |
| 14 | 1472 |
| 15 | 1468 |
| 16 | 1920 |
| 17 | 2336 |
| 18 | 2399 |
| 19 | 2009 |
| 20 | 1642 |
| 21 | 1198 |
| 22 | 663 |
| 23 | 22 |

-- JOIN RELEVANT TABLES TO FIND THE
-- CATEGORY-WISE DISTRIBUTION OF
PIZZAS.

```
SELECT  
    CATEGORY, COUNT(NAME)  
FROM  
    PIZZA_TYPES  
GROUP BY CATEGORY;
```

| CATEGORY | COUNT(NAME) |
|----------|-------------|
| Chicken | 6 |
| Classic | 8 |
| Supreme | 9 |
| Veggie | 9 |

GROUP THE ORDERS BY DATE AND
CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED
PER DAY.

```
SELECT
    ROUND(AVG(QUANTITY), 0) AS AVG_PIZZAS_ORDERED_PER_DAY
FROM
    (SELECT
        ORDERS.ORDER_DATE, SUM(ORDER_DETAILS.QUANTITY) AS QUANTITY
    FROM
        ORDERS
    JOIN ORDER_DETAILS ON ORDERS.ORDER_ID = ORDER_DETAILS.ORDER_ID
    GROUP BY ORDERS.ORDER_DATE) AS ORDER_QUANTITY;
```

| AVG_PIZZAS_ORDERED_PER_DAY |
|----------------------------|
| 138 |

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT  
    PIZZA_TYPES.NAME,  
    SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) AS REVENUE  
FROM  
    PIZZA_TYPES  
        JOIN  
    PIZZAS ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID  
        JOIN  
    ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
GROUP BY PIZZA_TYPES.NAME  
ORDER BY REVENUE DESC  
LIMIT 3;
```

| NAME | REVENUE |
|------------------------------|---------|
| The Thai Chicken Pizza | 43434 |
| The Barbecue Chicken Pizza | 42768 |
| The California Chicken Pizza | 41410 |

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

SELECT

```
PIZZA_TYPES.CATEGORY,  
ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) / (SELECT  
    ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),  
        2) AS TOTAL_SALES  
FROM  
    ORDER_DETAILS  
        JOIN  
            PIZZAS ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID) * 100 , 2) AS REVENUE  
FROM  
    PIZZA_TYPES  
        JOIN  
            PIZZAS ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID  
        JOIN  
            ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
GROUP BY PIZZA_TYPES.CATEGORY  
ORDER BY REVENUE DESC;
```

| CATEGORY | REVENUE |
|----------|---------|
| Classic | 26.91 |
| Supreme | 25.46 |
| Chicken | 23.96 |
| Veggie | 23.68 |

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
SELECT ORDER_DATE,  
SUM(REVENUE) OVER(ORDER BY ORDER_DATE) AS CUM_REVENUE  
FROM  
(SELECT ORDERS.ORDER_DATE,  
ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),2) AS REVENUE  
FROM ORDER_DETAILS JOIN PIZZAS  
ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
JOIN ORDERS  
ON ORDERS.ORDER_ID=ORDER_DETAILS.ORDER_ID  
GROUP BY ORDERS.ORDER_DATE) AS SALES;
```

| ORDER_DATE | CUM_REVENUE |
|------------|--------------------|
| 2015-01-01 | 2713.85 |
| 2015-01-02 | 5445.75 |
| 2015-01-03 | 8108.15 |
| 2015-01-04 | 9863.6 |
| 2015-01-05 | 11929.55 |
| 2015-01-06 | 14358.5 |
| 2015-01-07 | 16560.7 |
| 2015-01-08 | 19399.05 |
| 2015-01-09 | 21526.399999999998 |
| 2015-01-10 | 23990.35 |
| 2015-01-11 | 25862.649999999998 |
| 2015-01-12 | 27781.699999999997 |
| 2015-01-13 | 29831.299999999996 |
| 2015-01-14 | 32358.699999999997 |
| 2015-01-15 | 34343.5 |
| 2015-01-16 | 36937.65 |
| 2015-01-17 | 39001.75 |

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
SELECT NAME , REVENUE  
FROM  
    (SELECT CATEGORY , NAME , REVENUE,  
    RANK() OVER(PARTITION BY CATEGORY ORDER BY REVENUE DESC) AS RN  
FROM  
    (SELECT PIZZA_TYPES.CATEGORY, PIZZA_TYPES.NAME,  
    SUM(ORDER_DETAILS.QUANTITY) * PIZZAS.PRICE) AS REVENUE  
FROM PIZZA_TYPES  
JOIN  
PIZZAS ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID  
JOIN  
ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
GROUP BY PIZZA_TYPES.CATEGORY , PIZZA_TYPES.NAME) AS A) AS B  
WHERE RN >= 3;
```

| NAME | REVENUE |
|--|-------------------|
| The California Chicken Pizza | 41409.5 |
| The Southwest Chicken Pizza | 34705.75 |
| The Chicken Alfredo Pizza | 16900.25 |
| The Chicken Pesto Pizza | 16701.75 |
| The Pepperoni Pizza | 30161.75 |
| The Greek Pizza | 28454.10000000013 |
| The Italian Capocollo Pizza | 25094 |
| The Napolitana Pizza | 24087 |
| The Big Meat Pizza | 22968 |
| The Pepperoni, Mushroom, and Peppers Pizza | 18834.5 |
| The Sicilian Pizza | 30940.5 |
| The Pepper Salami Pizza | 25529 |
| The Prosciutto and Arugula Pizza | 24193.25 |
| The Soppressata Pizza | 16425.75 |
| The Calabrese Pizza | 15934.25 |
| The Spinach Supreme Pizza | 15277.75 |
| The Brie Carre Pizza | 11588.4999999999 |
| The Five Cheese Pizza | 26066.5 |
| The Vegetables + Vegetables Pizza | 24374.75 |
| The Spinach and Feta Pizza | 23271.25 |
| The Italian Vegetables Pizza | 16019.25 |
| The Spinach Pesto Pizza | 15596 |
| The Mediterranean Pizza | 15360.5 |
| The Green Garden Pizza | 13955.75 |