

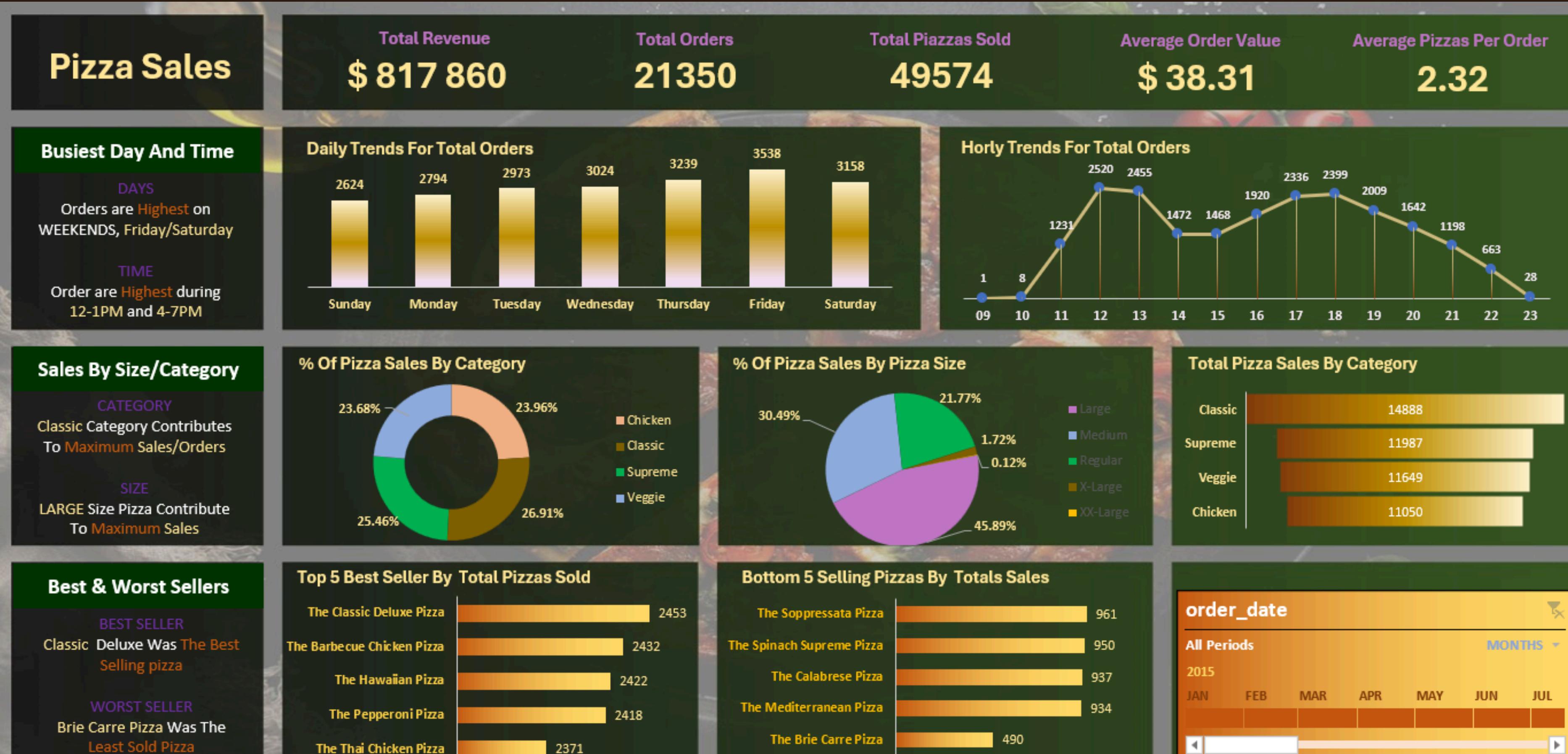
# PIZZA SALES ANALYSIS

*By - Atharva Tiwari*

- Analysed pizza sales dataset containing more than 48,000 rows of data and prepared an interactive dashboard.
- Used tools like SQL, Excel and Excel forecasting to get insights about Pizza Sales and customer behaviour.
- Provided a Sales Growth strategy which lead to a 10% increase in pizza sales revenue.



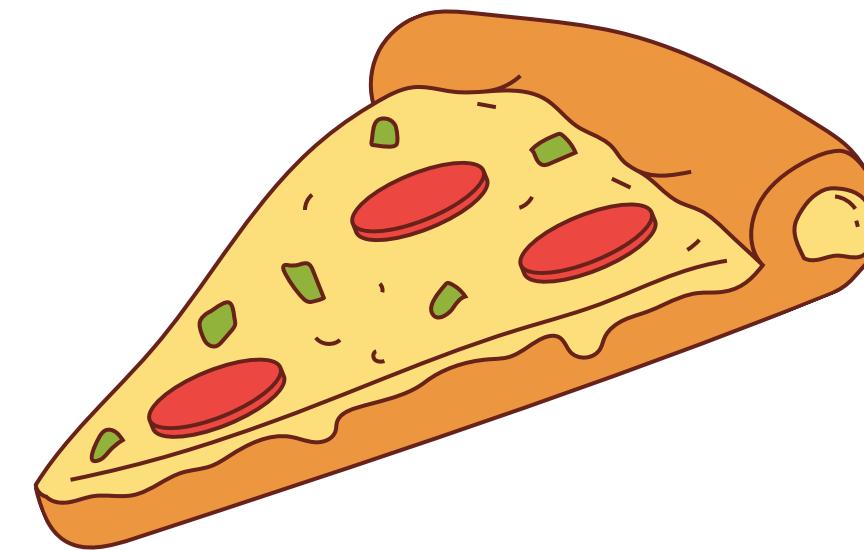
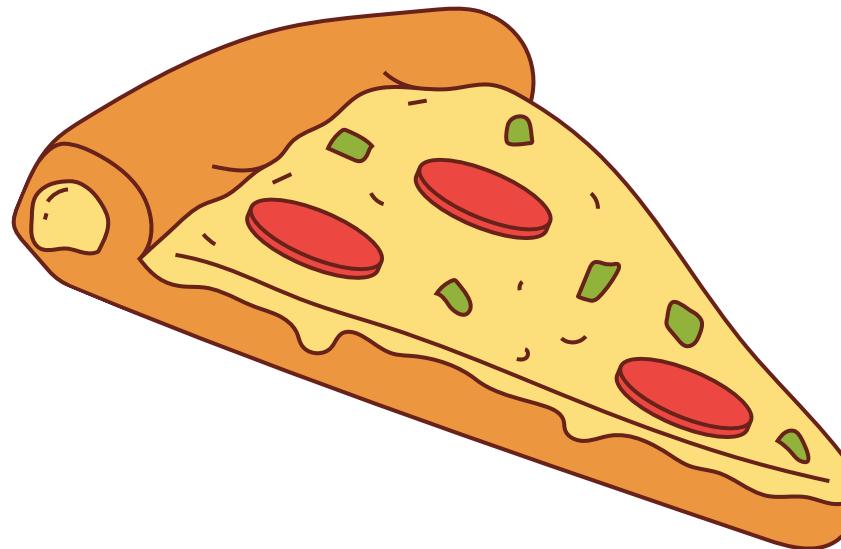
# Prepared A Dashboard Through The Pizza Dataset



# What is the total Revenue

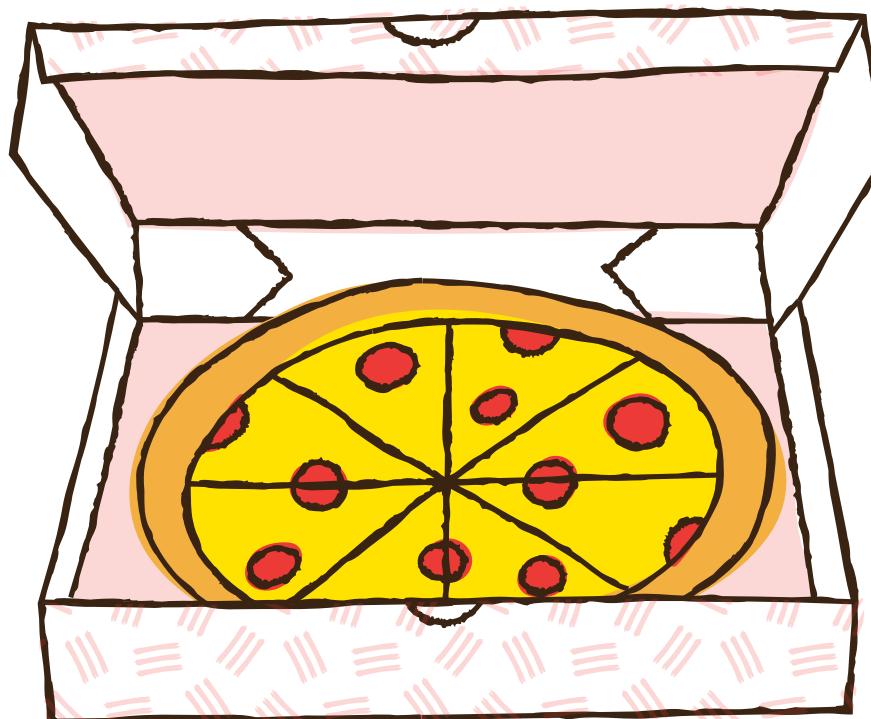
```
select sum(total_price) from pizza_sales_data;
```

	sum(total_price)
▶	817860.049999993

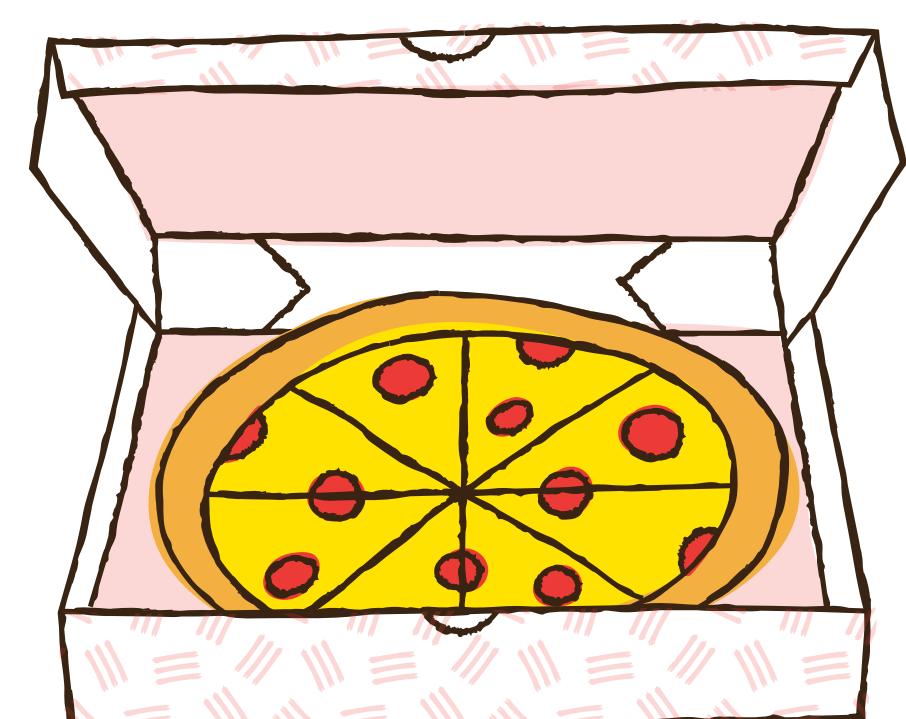


# What is the average order value per user?

```
select round(sum(total_price)/count(distinct order_id), 2)  
as average_order_value from pizza_sales_data;
```

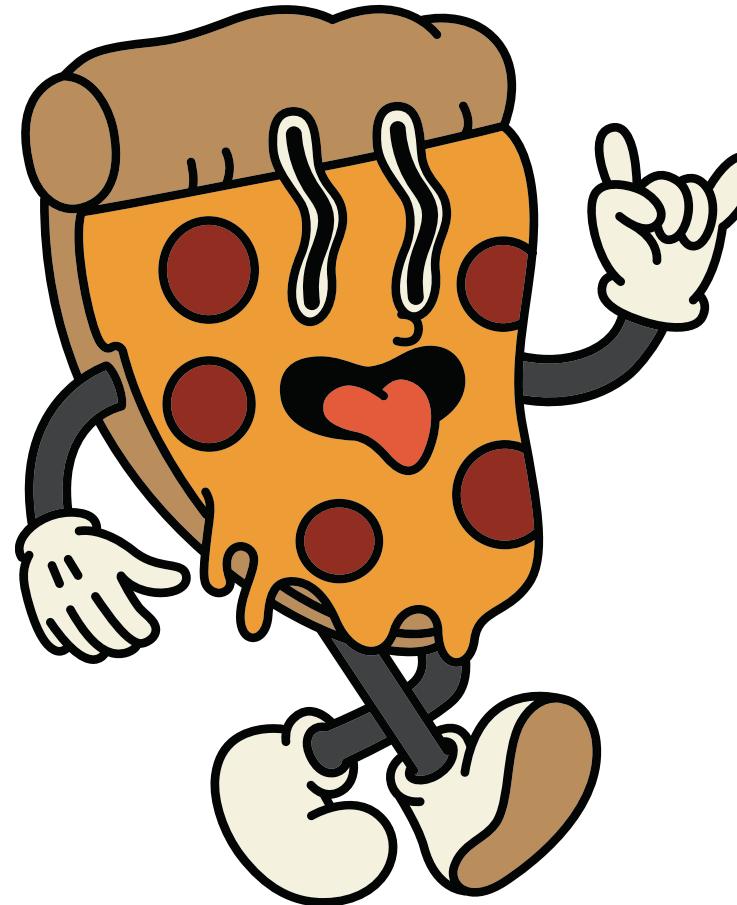


	average_order_value
▶	38.31

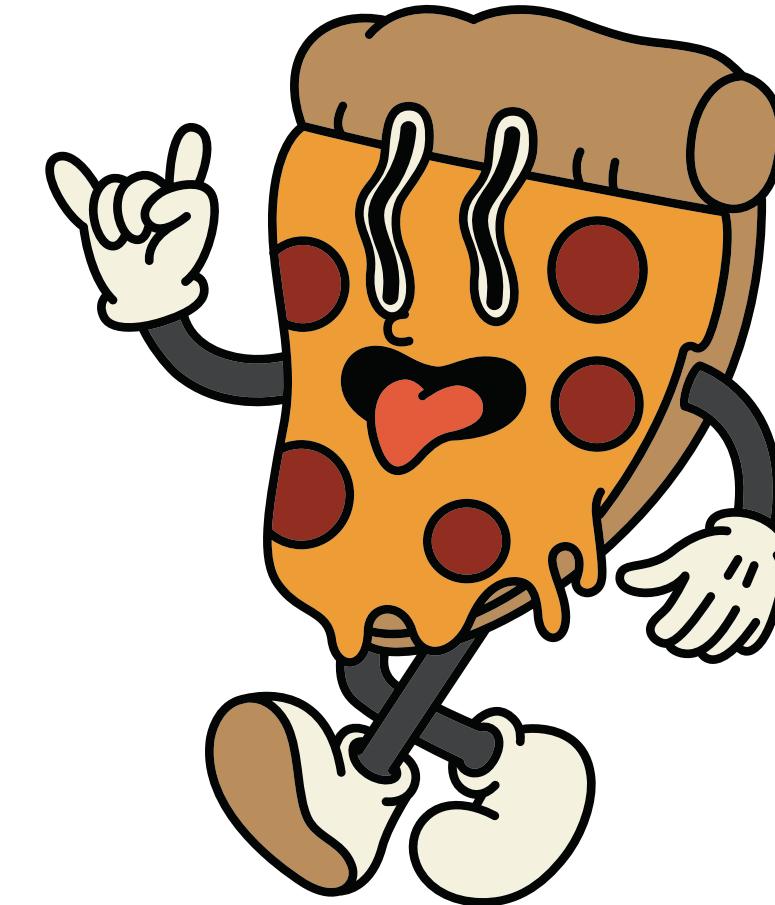


# How many pizzas were sold?

```
select sum(quantity) as quantity from pizza_sales_data;
```



quantity
49574

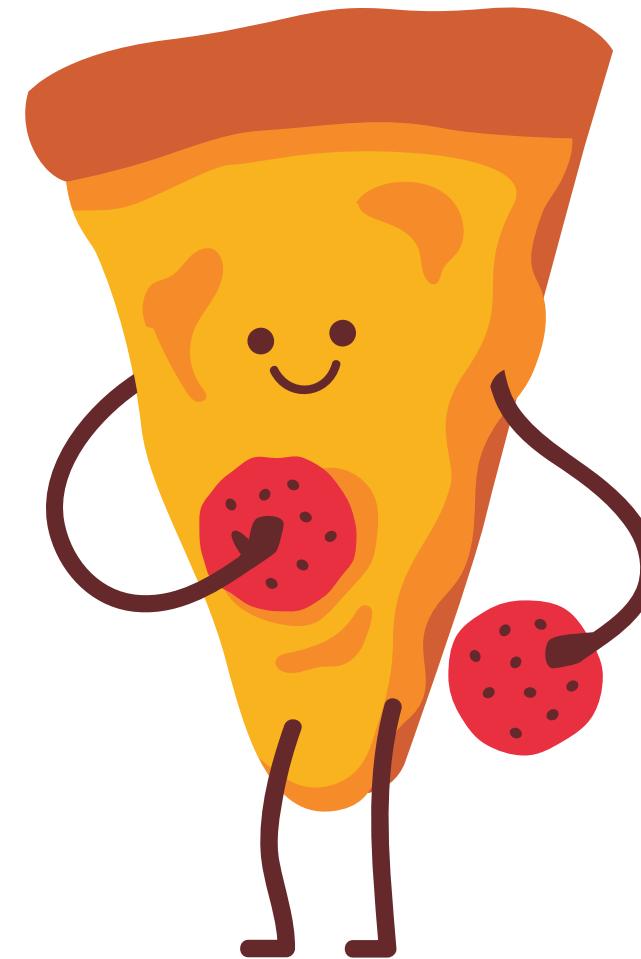


# How many order were placed?

```
select count(distinct order_id) as orders from pizza_sales_data;
```



orders
21350



# How many order were placed per user?

```
select round(sum(quantity)/count(distinct order_id), 2)  
as average_order_quantity from pizza_sales_data;
```

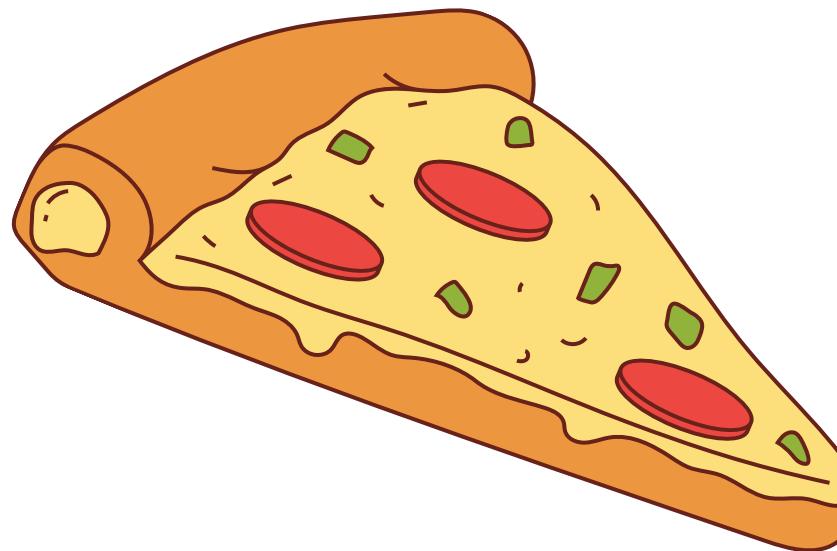


	average_order_quantity
▶	2.32

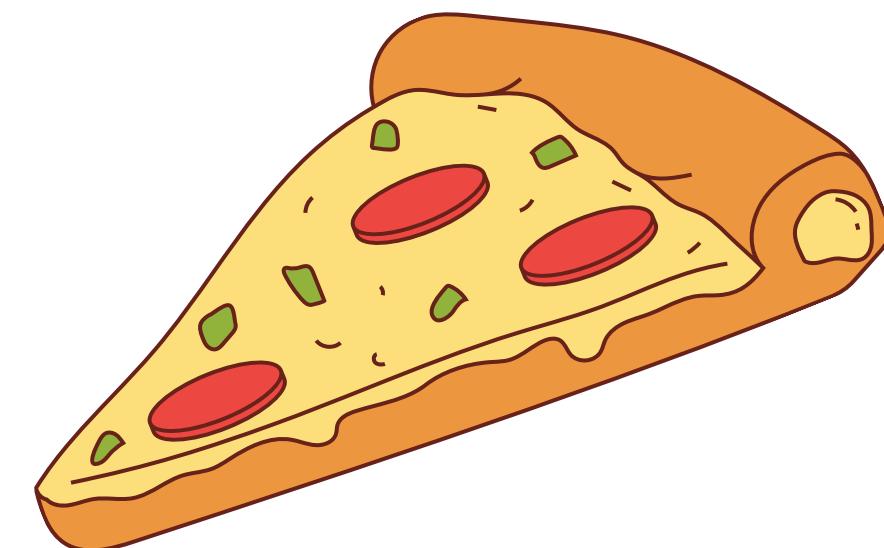


# Average pizzas per order

```
select order_id, sum(quantity) from pizza_sales_data  
group by order_id;
```



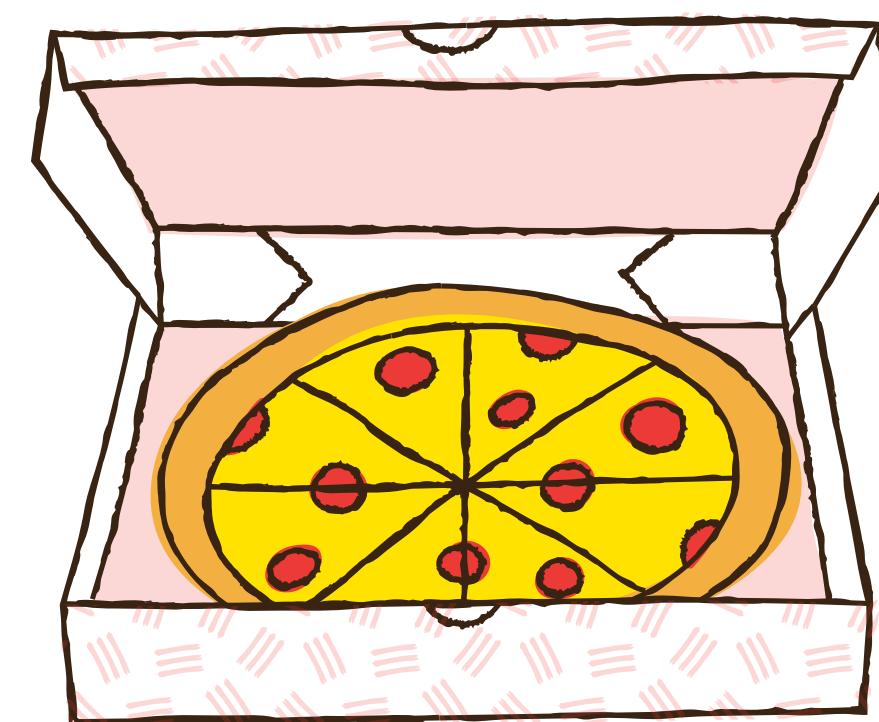
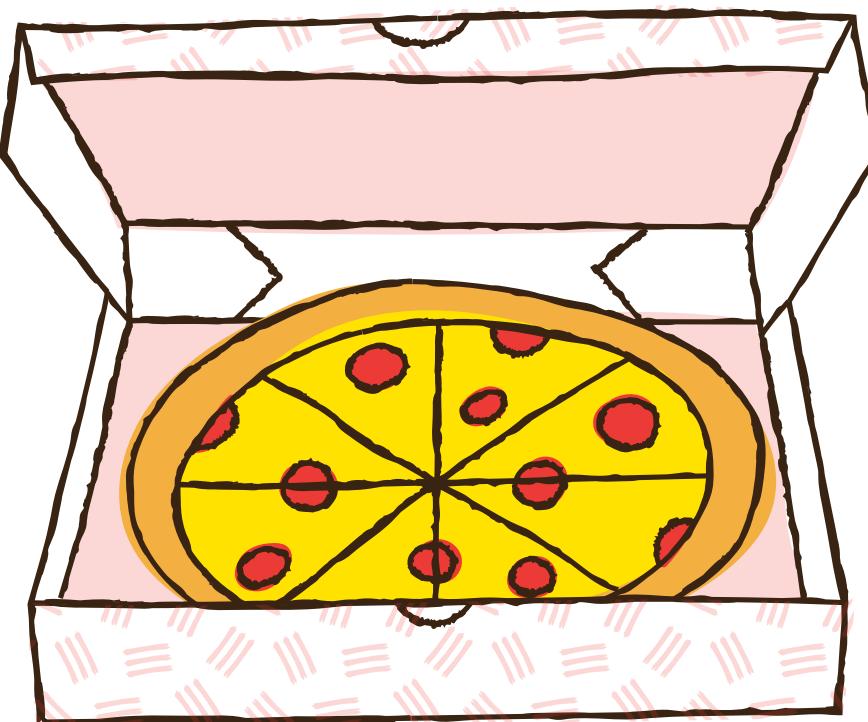
dayt	orders
Monday	7271
Thursday	7121
Wednesday	7107
Saturday	7086
Tuesday	7075
Sunday	7070
Friday	6844



# trend with day hour

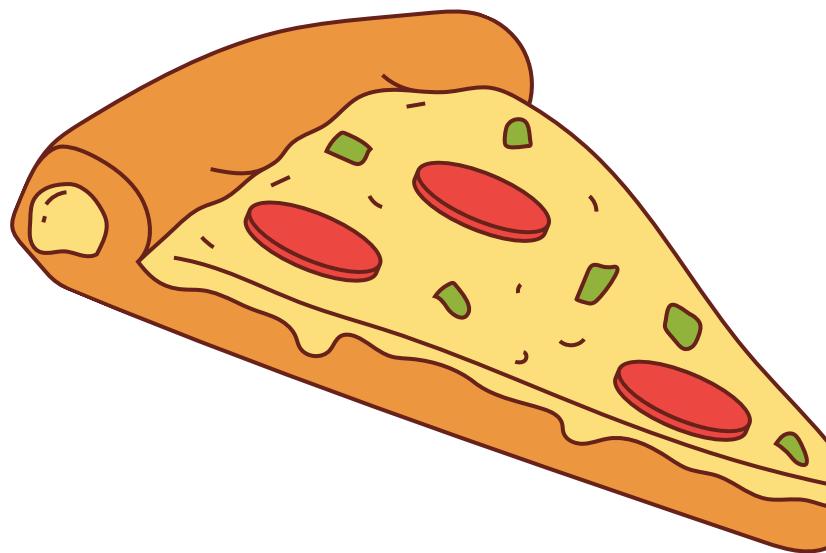
```
select hour(str_to_date(order_time, '%H:%i:%s')) as hourt,  
sum(quantity) as orders from pizza_sales_data  
group by hourt  
order by hourt;
```

	hourt	orders
▶	9	4
	10	18
	11	2728
	12	6776
	13	6413
	14	3613
	15	3216
	16	4239
	17	5211
	18	5417
	19	4406
	20	3534
	21	2545
	22	1386
	23	68

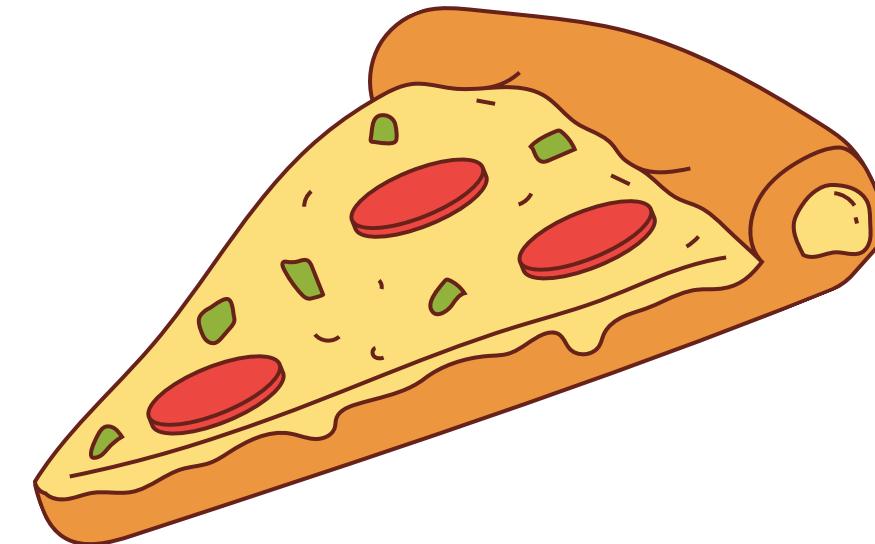


# Pizza sales with month

```
select monthname(str_to_date(order_date, '%Y-%m-%d'))as month_name,  
sum(quantity) as orders from pizza_sales_data |group by month_name;
```

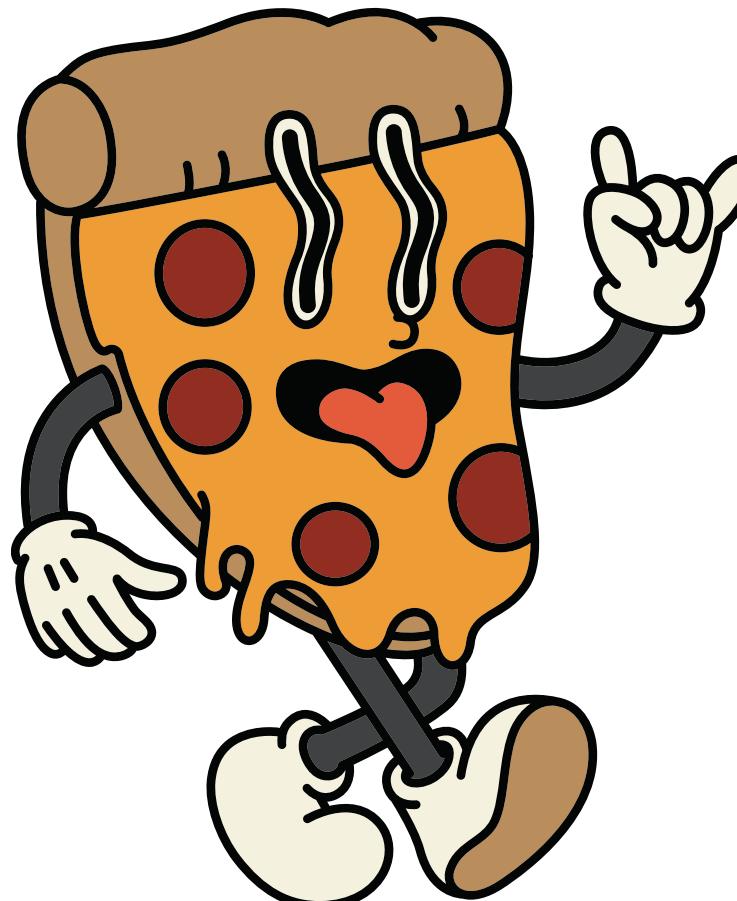


	month_name	orders
▶	January	4232
	February	3961
	March	4261
	April	4151
	May	4328
	June	4107
	July	4392
	August	4168
	September	3890
	October	3883
	November	4266
	December	3935

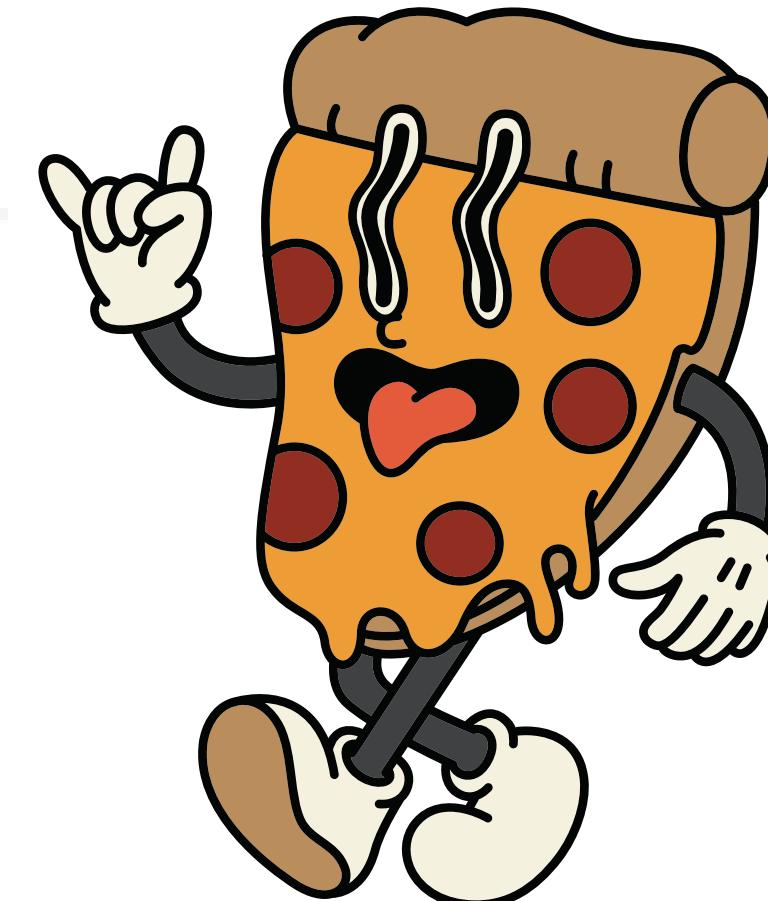


# % of pizza sale per category

```
select pizza_category, sum(quantity) as counts, round(sum(total_price),2) as revenue,  
round(sum(total_price)/(select sum(total_price) from pizza_sales_data),4)*100  
as per_cent_total  
from pizza_sales_data  
group by pizza_category  
order by per_cent_total DESC;
```

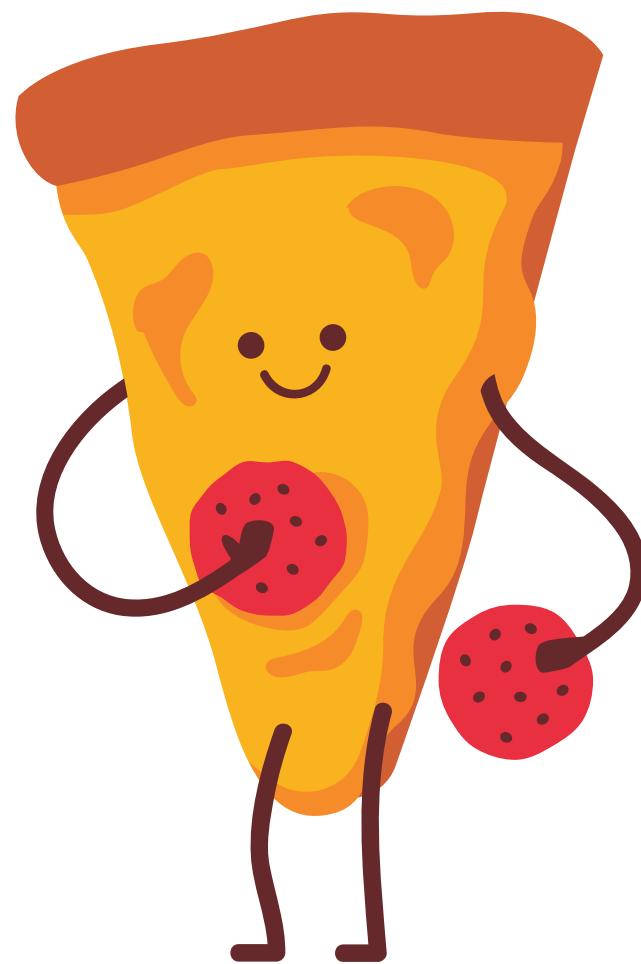


	pizza_category	counts	revenue	per_cent_total
▶	Classic	14888	220053.1	26.91
	Supreme	11987	208197	25.46
	Chicken	11050	195919.5	23.96
	Veggie	11649	193690.45	23.68

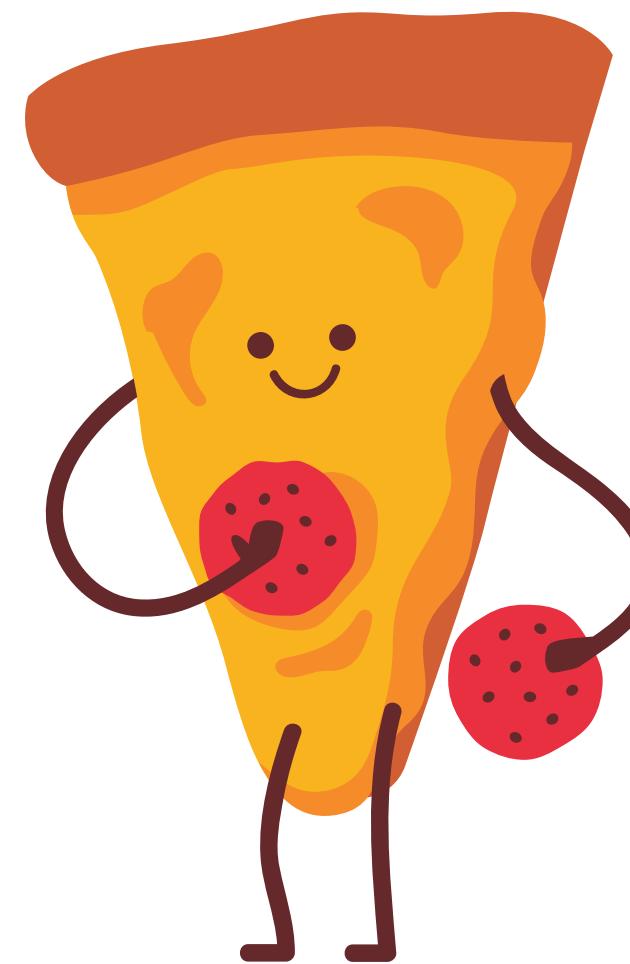


# Average price of each pizza category

```
select pizza_category, round(avg(total_price),2) as avg_price  
from pizza_sales_data  
group by pizza_category  
order by avg_price DESC;
```



	pizza_category	avg_price
▶	Chicken	18.12
	Supreme	17.68
	Veggie	16.92
	Classic	15.09



# How many order were placed per user?

```
select round(sum(quantity)/count(distinct order_id), 2)  
as average_order_quantity from pizza_sales_data;
```



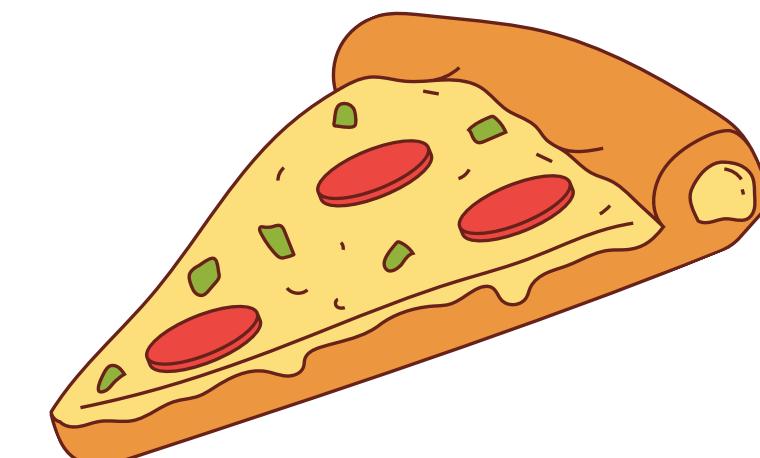
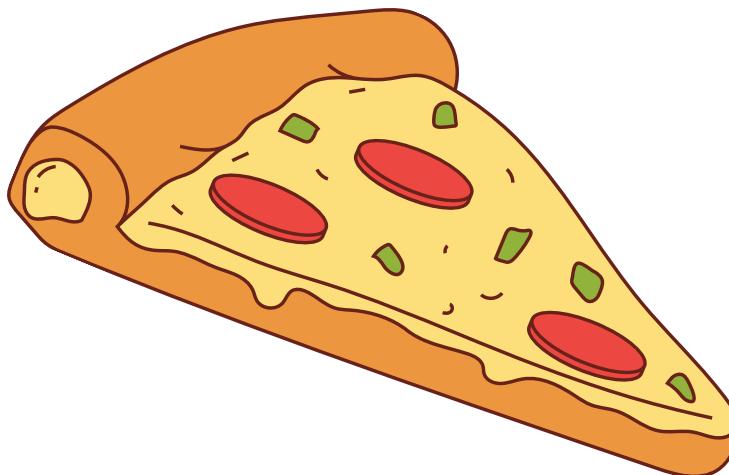
	average_order_quantity
▶	2.32



# % sales by pizza size

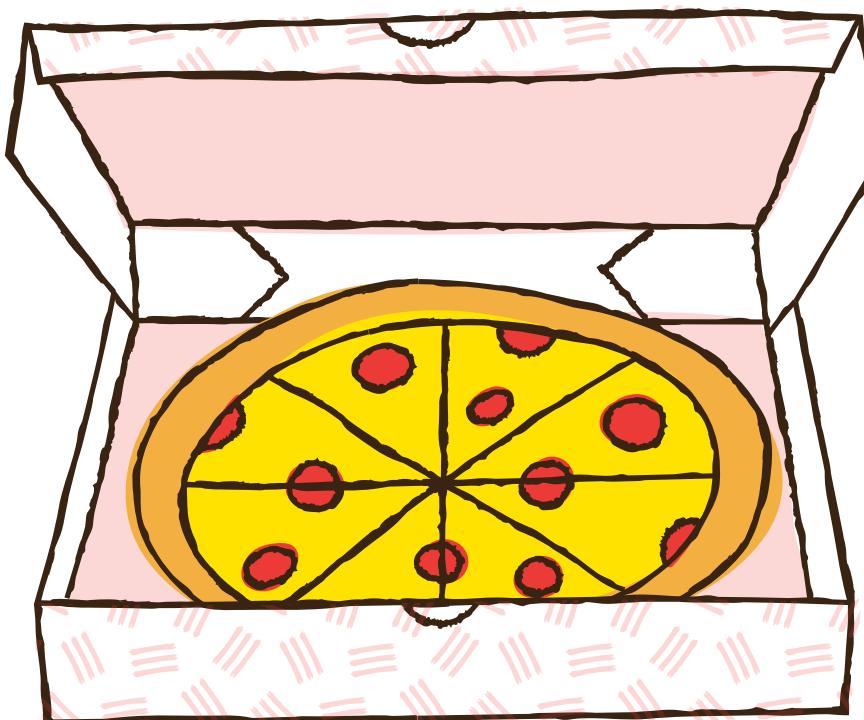
```
select pizza_size, sum(total_price) as revenue,  
round(sum(quantity)/(select sum(quantity) from pizza_sales_data),4)*100  
as per_cent_total from pizza_sales_data  
group by pizza_size  
order by per_cent_total DESC;
```

	pizza_size	revenue	per_cent_total
▶	L	375318.7000000087	38.2400
	M	249382.25	31.5400
	S	178076.49999999843	29.0500
	XL	14076	1.1100
	XXL	1006.600000000005	0.0600

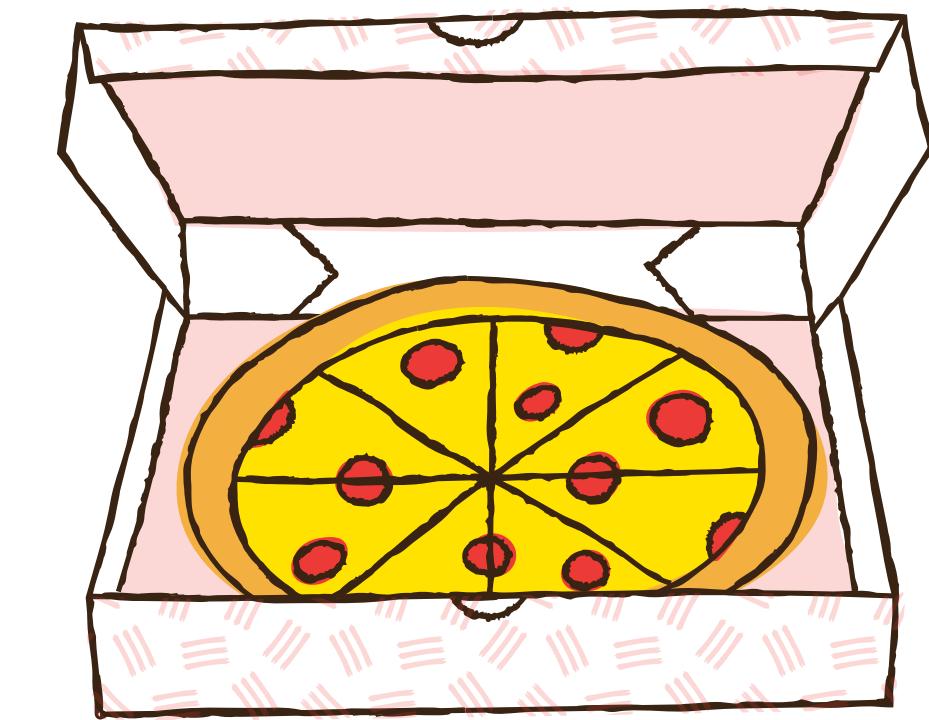


# Total pizza sold per category

```
select pizza_category, sum(quantity) as counts  
from pizza_sales_data  
group by pizza_category  
order by counts DESC;
```

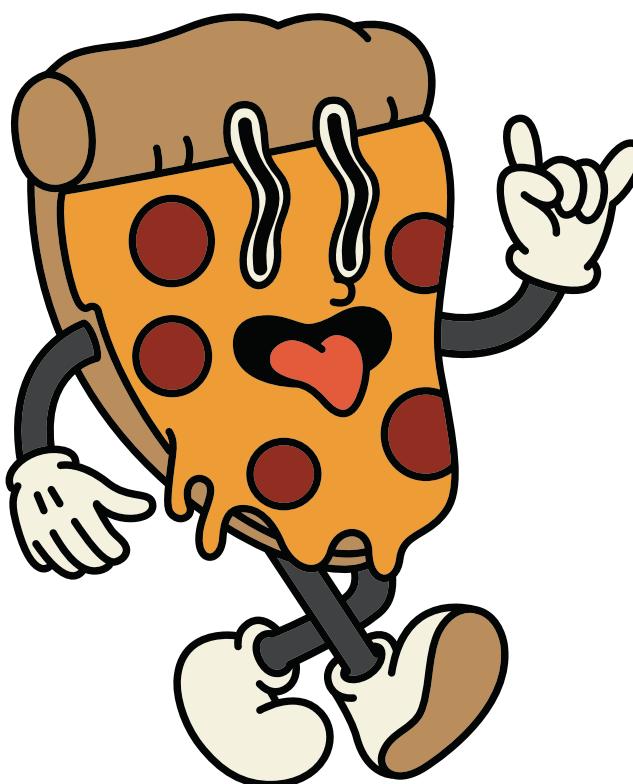


	pizza_category	counts
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

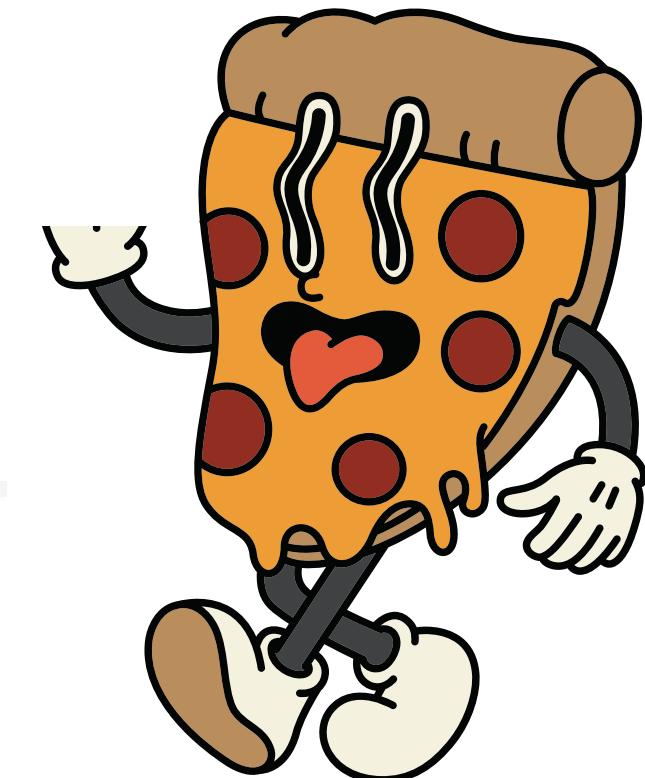


# Top 5 best seller pizzas by total pizzas sold

```
select pizza_name, sum(quantity) as amt_sold,  
sum(total_price) as revenue, avg(total_price) as avg_price  
from pizza_sales_data  
group by pizza_name  
order by amt_sold DESC limit 5;
```



	pizza_name	amt_sold	revenue	avg_price
▶	The Classic Deluxe Pizza	2453	38180.5	15.803187086092715
	The Barbecue Chicken Pizza	2432	42768	18.03035413153457
	The Hawaiian Pizza	2422	32273.25	13.61740506329114
	The Pepperoni Pizza	2418	30161.75	12.73184888138455
	The Thai Chicken Pizza	2371	43434.25	18.762095032397408

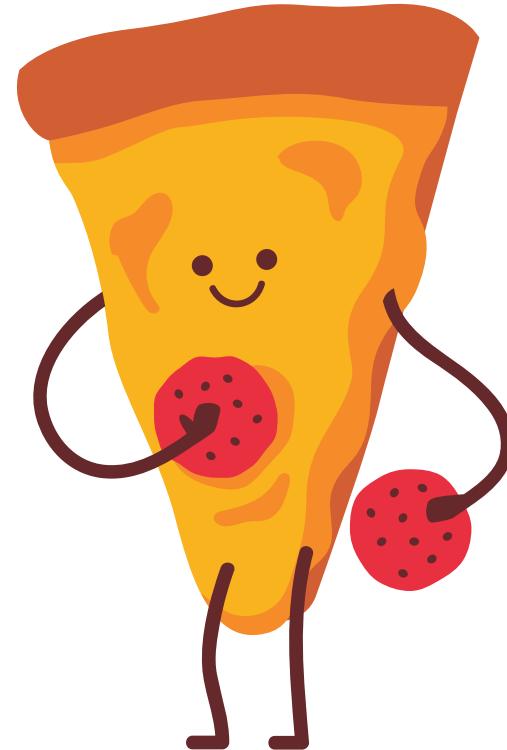


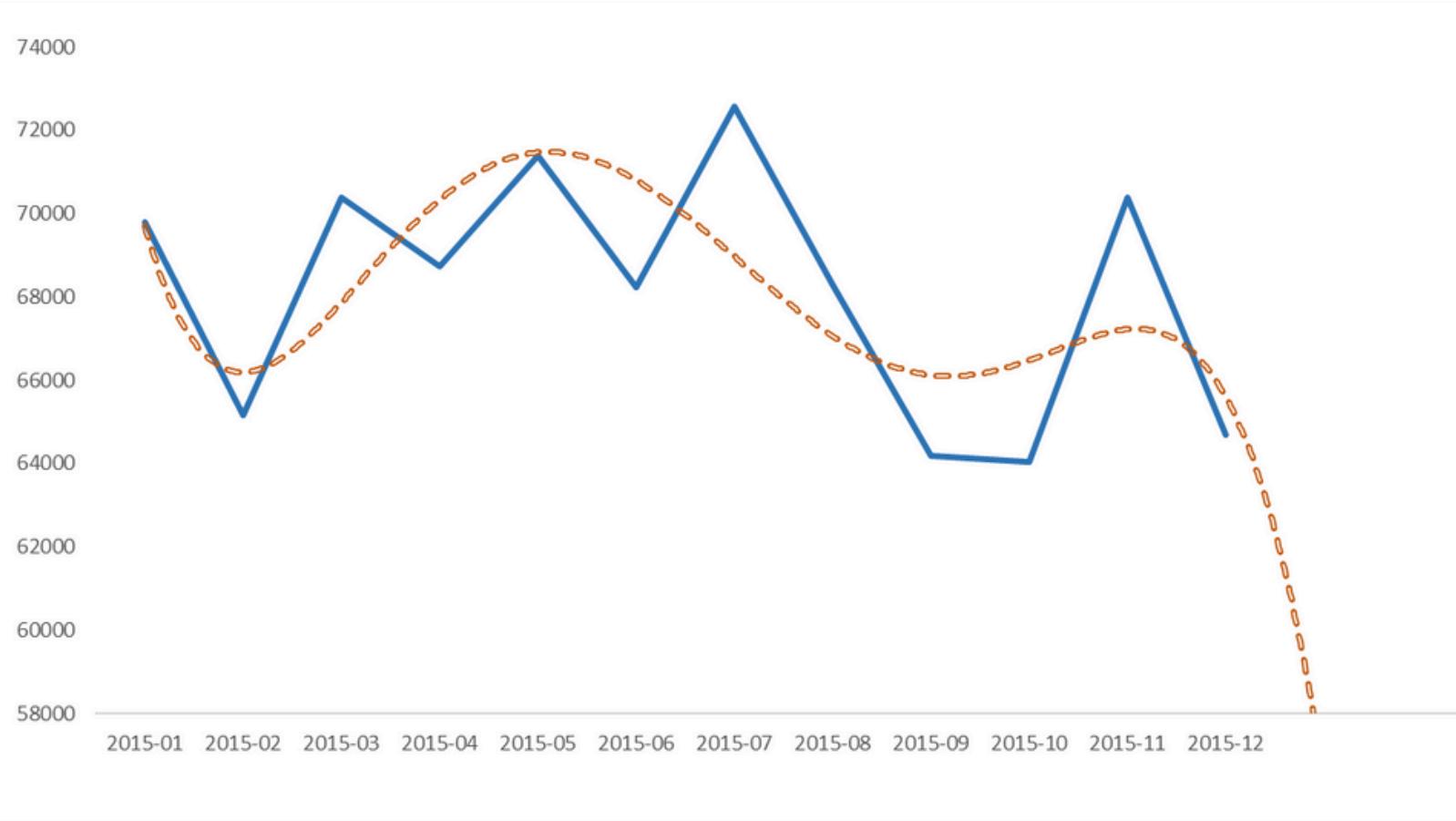
# Least 5 sold pizzas by total pizzas sold



```
select pizza_name, sum(quantity) as amt_sold,  
sum(total_price) as revenue, avg(total_price) as avg_price  
from pizza_sales_data  
group by pizza_name  
order by amt_sold ASC limit 5;
```

	pizza_name	amt_sold	revenue	avg_price
▶	The Brie Carre Pizza	490	11588.49999999999	24.142708333333125
	The Mediterranean Pizza	934	15360.5	16.64192849404117
	The Calabrese Pizza	937	15934.25	17.189050701186623
	The Spinach Supreme Pizza	950	15277.75	16.252925531914894
	The Soppressata Pizza	961	16425.75	17.163793103448278





- Data forecasting suggests a 10% drop in monthly revenue for next 3 month.
- Prices of pizzas and pizza unit sales can be altered generate extra Revenue.
- Here the data is analysed by the pizza Category to increase the revenue
- Pizza prices can be increased upto 0.5%-1% , as well as pizza unit sales can be increased upto 7% to increase the revenue

actual revenue	
\$8,17,860.05	
expected revenue	
\$9,18,200.00	increase in revenue 10.93%

- Following measures can lead to 11% increase in revenue

Chicken Pizza							Supreme Pizza						
Price Of Pizza		Quantity Sold					Price Of Pizza		Quantity Sold				
200	176.6505	10000	10500	11000	11500	12000	% inc/dec in prices	211909.437	11000	11500	12000	12500	13000
\$17.90	\$1,79,000.00	\$1,87,950.00	\$1,96,900.00	\$2,05,850.00	\$2,14,800.00	-1.19%	\$17.60	\$1,93,600.00	\$2,02,400.00	\$2,11,200.00	\$2,20,000.00	\$2,28,800.00	-0.4%
\$18.00	\$1,80,000.00	\$1,89,000.00	\$1,98,000.00	\$2,07,000.00	\$2,16,000.00	-0.64%	\$17.70	\$1,94,700.00	\$2,03,550.00	\$2,12,400.00	\$2,21,250.00	\$2,30,100.00	0.1%
\$18.10	\$1,81,000.00	\$1,90,050.00	\$1,99,100.00	\$2,08,150.00	\$2,17,200.00	-0.09%	\$17.80	\$1,95,800.00	\$2,04,700.00	\$2,13,600.00	\$2,22,500.00	\$2,31,400.00	0.6%
\$18.20	\$1,82,000.00	\$1,91,100.00	\$2,00,200.00	\$2,09,300.00	\$2,18,400.00	0.47%	\$17.90	\$1,96,900.00	\$2,05,850.00	\$2,14,800.00	\$2,23,750.00	\$2,32,700.00	1.2%
% inc in quantity s	-10%	-5%	0%	4%	9%		% inc in quantity s	-8.23%	-4.06%	0.11%	4.28%	8.45%	
Classic Pizza							Veggie Pizza						
Price Of Pizza		Quantity Sold					Price Of Pizza		Quantity Sold				
224	717.0967	14000	14500	15000	15500	16000	% inc/dec in prices	197073.9848	11000	11500	12000	12500	13000
\$15.00	\$2,10,000.00	\$2,17,500.00	\$2,25,000.00	\$2,32,500.00	\$2,40,000.00	-0.62%	\$16.80	\$1,84,800.00	\$1,93,200.00	\$2,01,600.00	\$2,10,000.00	\$2,18,400.00	-0.7%
\$15.10	\$2,11,400.00	\$2,18,950.00	\$2,26,500.00	\$2,34,050.00	\$2,41,600.00	0.04%	\$16.90	\$1,85,900.00	\$1,94,350.00	\$2,02,800.00	\$2,11,250.00	\$2,19,700.00	-0.1%
\$15.20	\$2,12,800.00	\$2,20,400.00	\$2,28,000.00	\$2,35,600.00	\$2,43,200.00	0.70%	\$17.00	\$1,87,000.00	\$1,95,500.00	\$2,04,000.00	\$2,12,500.00	\$2,21,000.00	0.4%
\$15.30	\$2,14,200.00	\$2,21,850.00	\$2,29,500.00	\$2,37,150.00	\$2,44,800.00	1.37%	\$17.10	\$1,88,100.00	\$1,96,650.00	\$2,05,200.00	\$2,13,750.00	\$2,22,300.00	1.0%
% inc in quantity s	-6%	-3%	1%	4%	7%		% inc in quantity s	-5.57%	-1.28%	3.01%	7.31%	11.60%	