**Toy Sales Report**

* + **1. Production Performance Analysis**

select\* from Toy\_product

select top 5 P.product\_id, P.Product\_name, sum(S.units) as 'Total\_units\_sold',

sum(S.units \*Product\_price) as revenue, Sum(S.units \* (product\_price-product\_cost)) as 'Profit'

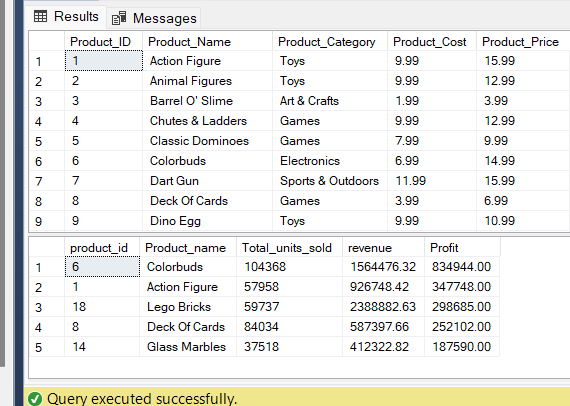
from Toy\_product P

join Toy\_sale s

on p.product\_id=s.product\_id

group by p.product\_id,P.product\_name

order by profit desc



**2. Store Performance Analysis**

select s.store\_id, s.Date, st.store\_name, sum(s.units) as 'Total\_units\_sold',

sum(s.units\*p.product\_price) as 'total\_rev',

SUM(s.units \* (product\_price-product\_cost)) as 'profit'

from Toy\_sale s

join Toy\_store st

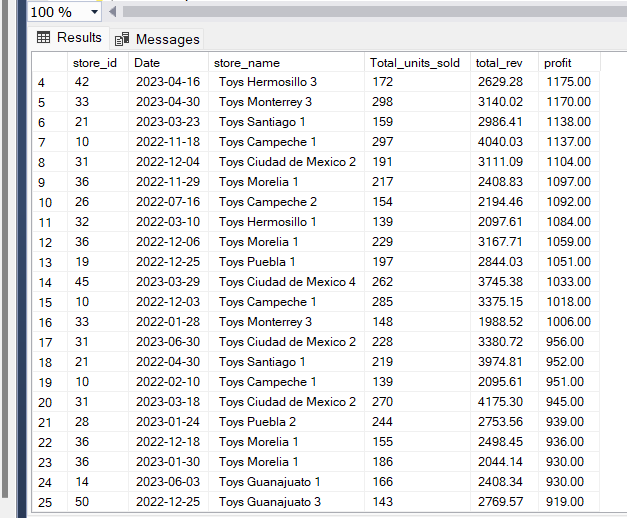
on s.store\_id=st.store\_id

join Toy\_product p

on s.product\_id=p.product\_id

group by s.store\_id, s.Date, st.store\_name

order by profit desc



**3. Complex Monthly Sales Trend Analysis**

ith Sales\_trnd As (select datename(month,date) as 'sales\_month',

sum(case when year(date)=2022 then units else 0 end) as 'sales\_of\_2022',

sum(case when year(date)=2023 then units else 0 End) as 'Sales\_of\_2023',

(sum(case when year(date)=2023 then units else 0 end)-

sum(case when year(date)=2022 then units else 0 End)) as 'diff\_in\_sales'

from Toy\_sale

group by datename(month,date))

Select \*,round(cast((100.0\* diff\_in\_sales/sales\_of\_2022) as float),2) as 'Perc\_diff\_in\_sales'

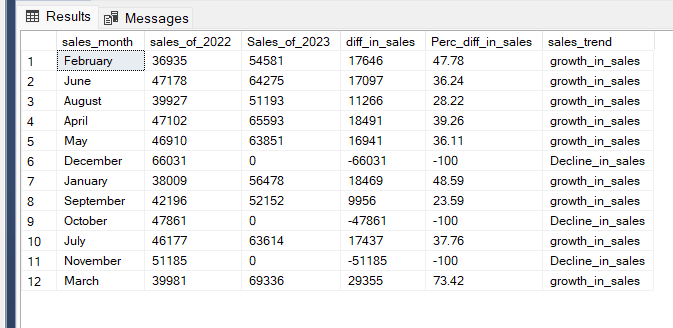
, case when diff\_in\_sales<0 then 'Decline\_in\_sales'

when diff\_in\_sales>0 then 'growth\_in\_sales'

else ''

end as 'sales\_trend'

from sales\_trnd



**4. Cumulative Distribution of Profit Margin**

select P.product\_id, P.Product\_category,

sum(S.units \*Product\_price) as revenue, Sum(S.units \* (product\_price-product\_cost)) as 'Profit'

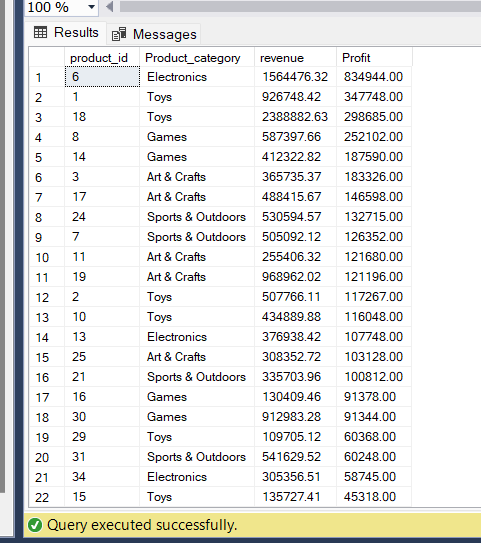
from Toy\_product P

join Toy\_sale s

on p.product\_id=s.product\_id

group by p.product\_id,P.product\_category

order by profit desc



**5. Store Inventory Turnover Analysis**

with sales\_category as ( select p.product\_category,

SUM(case when year (s.date)=2022 then s.units\*p.product\_cost else 0 end) as COGS\_2022

,SUM(case when year (s.date)=2022 then s.units\*p.product\_cost else 0 end) as COGS\_2023

from Toy\_sale s

join Toy\_product p

on s.product\_id=p.product\_id

group by p.product\_category)

,avg\_inventory as (select p.product\_category,avg(case when year(s.date)=2022 then i.stock\_on\_hand else 0 end) as Avg\_inventory\_2022

,avg(case when year(s.date)=2023 then i.stock\_on\_hand else 0 end) as Avg\_inventory\_2023

from Toy\_inventory i

join Toy\_product P

on i.product\_id=p.product\_id

join Toy\_sale S

on i.product\_id=s.Product\_ID

group by p.Product\_Category)

,Inv\_goods\_sold as (select sc.product\_category, sc.COGS\_2022, ai.Avg\_inventory\_2022, sc.COGS\_2023,ai.Avg\_inventory\_2023

from sales\_category sc

join avg\_inventory Ai

on sc.product\_category=ai.product\_category)

select Product\_category,COGS\_2022,avg\_inventory\_2022,(COGS\_2022/avg\_inventory\_2022) as inv\_turn\_ratio\_2022,cogs\_2023, avg\_inventory\_2023,

(COGS\_2023/avg\_inventory\_2023) as inv\_turn\_ratio\_2023

from Inv\_goods\_sold

