```sql
--1 Provide a query showing the Invoices of customers who are from Brazil.
--The resultant table should show the customer's
--full name, Invoice ID, Date of the invoice and billing country.

select * from Customer
select concat(cust.FirstName,cust.LastName) as FullName
,inv.InvoiceId,inv.InvoiceDate,inv.BillingCountry
from Customer cust
join Invoice inv
on cust.CustomerId=inv.CustomerId where cust.Country='Brazil'


--2 Provide a query that shows the invoices associated with each sales agent.
--The resultant table should include the Sales Agent's full name.
select inv.invoiceid,concat(sales.FirstName,sales.lastname) as FullName
from Invoice inv
join Customer cust
on cust.CustomerId=inv.CustomerId join Employee sales on cust.SupportRepId
=sales.EmployeeId

--2 Provide a query that shows the invoices associated with each sales agent.
--The resultant table should include the Sales Agent's full name.
select count(inv.invoiceid),concat(sales.FirstName,sales.lastname) as FullName
from Invoice inv
join Customer cust
on cust.CustomerId=inv.CustomerId
join Employee sales
on cust.SupportRepId =sales.EmployeeId
group by concat(sales.FirstName,sales.lastname)

--3 Provide a query that shows the Invoice Total, Customer name, Country and
--Sale Agent name for all invoices and customers.
select inv.Total, cust.FirstName, cust.Country, sales.FirstName
from Invoice inv
join Customer cust
on cust.CustomerId=inv.CustomerId
join Employee sales
on cust.SupportRepId =sales.EmployeeId

--Provide a query that includes the purchased track name AND
--artist name with each invoice line item.
select tra.Name, art.Name, invl.invoiceLineId
from Track tra
join InvoiceLine invl on invl.TrackId=tra.TrackId
join Album al on al.AlbumId=tra.AlbumId
join Artist art on art.ArtistId=al.ArtistId

--Provide a query that shows the total number of tracks in each playlist.
--The Playlist name should be include on the resultant table.
select pl.Name as PlayListName,count(tra.TrackID)
from Track tra
join PlaylistTrack plt
on tra.TrackId=plt.TrackId
join Playlist pl
on pl.PlaylistId=plt.PlaylistId group by pl.Name

--Provide a query that shows all the Tracks, but displays no IDs.
--The resultant table should include the Album name, Media type and Genre.
```

```sql
select trc.Name as TrackName, gen.Name as GenreName ,al.Title as AlbumName,md.Name,
md.Name as MediaName
from Track trc
join Album al on al.AlbumId=trc.AlbumId
join MediaType md on md.MediaTypeId =trc.MediaTypeId
join Genre gen on gen.GenreId=trc.GenreId

--7. Provide a query that shows all Invoices but includes the # of invoice line items.
select top 5 * from Invoice

select top 5 * from InvoiceLine
select count(invl.InvoiceLineId),inv.InvoiceId
from Invoice inv
join InvoiceLine invl on inv.InvoiceId=invl.InvoiceId group by inv.InvoiceId

--8 Provide a query that shows total sales made by each sales agent.
select * from Employee
select * from Customer
select concat(sales.FirstName,sales.LastName) as fullName, sum(inv.InvoiceId) TotalSales
from Employee sales
join Customer cust on sales.EmployeeId=cust.SupportRepId
join Invoice inv on inv.CustomerId=cust.CustomerId group by
concat(sales.FirstName,sales.LastName)

--9 Provide a query that shows the # of customers assigned to each sales agent.
select concat(sales.FirstName,sales.LastName) as FullName ,count(cust.CustomerId) as
TotalCustomers
from Employee sales
join Customer cust on cust.SupportRepId=sales.EmployeeId
where sales.Title='Sales Support Agent'
group by concat(sales.FirstName,sales.LastName)

--10 Provide a query that shows the total sales per country. Which country's customers
spent the most?
select  Top 1 cust.Country ,count(inv.InvoiceId) as ToatlOrders ,Sum(inv.Total) as
TotalMoneySpent
from Customer cust
join Invoice Inv on inv.CustomerId=cust.CustomerId
group by (cust.Country)
Order By TotalMoneySpent desc

--11 Provide a query that shows the most purchased track of 2013.
select count(inv.InvoiceId) as TotalPurchased, trc.Name
from Track trc
join InvoiceLine invl on invl.TrackId=trc.TrackId
join Invoice inv on inv.InvoiceId=invl.InvoiceId
where year(inv.InvoiceDate) =2013 group by (trc.Name) order by TotalPurchased desc

--12 Provide a query that shows the most purchased Media Type.
select count(trc.MediaTypeId) as TotalPurchased ,md.Name
from Track trc
join MediaType md on md.MediaTypeId=trc.MediaTypeId
join InvoiceLine invl on invl.TrackId=trc.TrackId
join Invoice inv on inv.InvoiceId=invl.InvoiceId
group by (md.Name) order by TotalPurchased desc

--13 Provide a query that shows the top 3 best selling artists.
```

```sql
select art.Name,count(inv.InvoiceId) as TotalSales
from Track tra
join InvoiceLine invl on invl.TrackId=tra.TrackId
join Invoice inv on inv.InvoiceId=invl.InvoiceId
join Album al on al.AlbumId=tra.AlbumId
join Artist art on art.ArtistId=al.ArtistId
group by (art.Name)
order by TotalSales desc

Select table2.* from(select DENSE_RANK() Over(Order by count(i.InvoiceId) Desc) as
'Rank',at.Name,count(i.InvoiceId) as TotalSales
from Track t
join InvoiceLine il on il.TrackId=t.TrackId
join Invoice i on i.InvoiceId=il.InvoiceId
join Album al on al.AlbumId=t.AlbumId
join Artist at on at.ArtistId=al.ArtistId
group by at.Name,at.ArtistId ) as table2
where table2.Rank <=3

--14 Which sales agent made the most in sales over all?
select concat(sales.FirstName,sales.LastName) as fullName, sum(inv.Total) TotalSales
from Employee sales
join Customer cust on sales.EmployeeId=cust.SupportRepId
join Invoice inv on inv.CustomerId=cust.CustomerId group by
concat(sales.FirstName,sales.LastName)

--15 Which sales agent made the most in sales in 2010?
select concat(sales.FirstName,sales.LastName) as fullName, sum(inv.Total) TotalSales
from Employee sales
join Customer cust on sales.EmployeeId=cust.SupportRepId
join Invoice inv on inv.CustomerId=cust.CustomerId
where year(inv.invoiceDate)=2010
group by concat(sales.FirstName,sales.LastName)

--16 Which sales agent made the most in sales in 2009?

select concat(sales.FirstName,sales.LastName) as fullName, sum(inv.Total) TotalSales
from Employee sales
join Customer cust on sales.EmployeeId=cust.SupportRepId
join Invoice inv on inv.CustomerId=cust.CustomerId
where year(inv.invoiceDate)=2009
group by concat(sales.FirstName,sales.LastName)
Order by TotalSales desc

--17 Provide a query that shows all the Tracks, but displays no IDs.
--The resultant table should include the Album name, Media type and Genre.
```