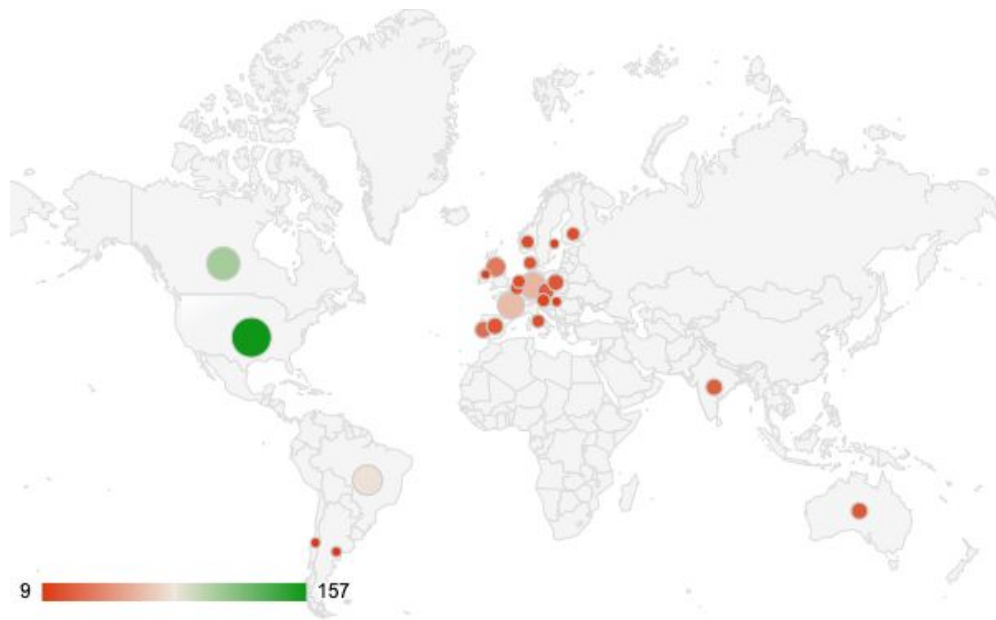




Udacity Business Analytics - SQL

Casey Mims

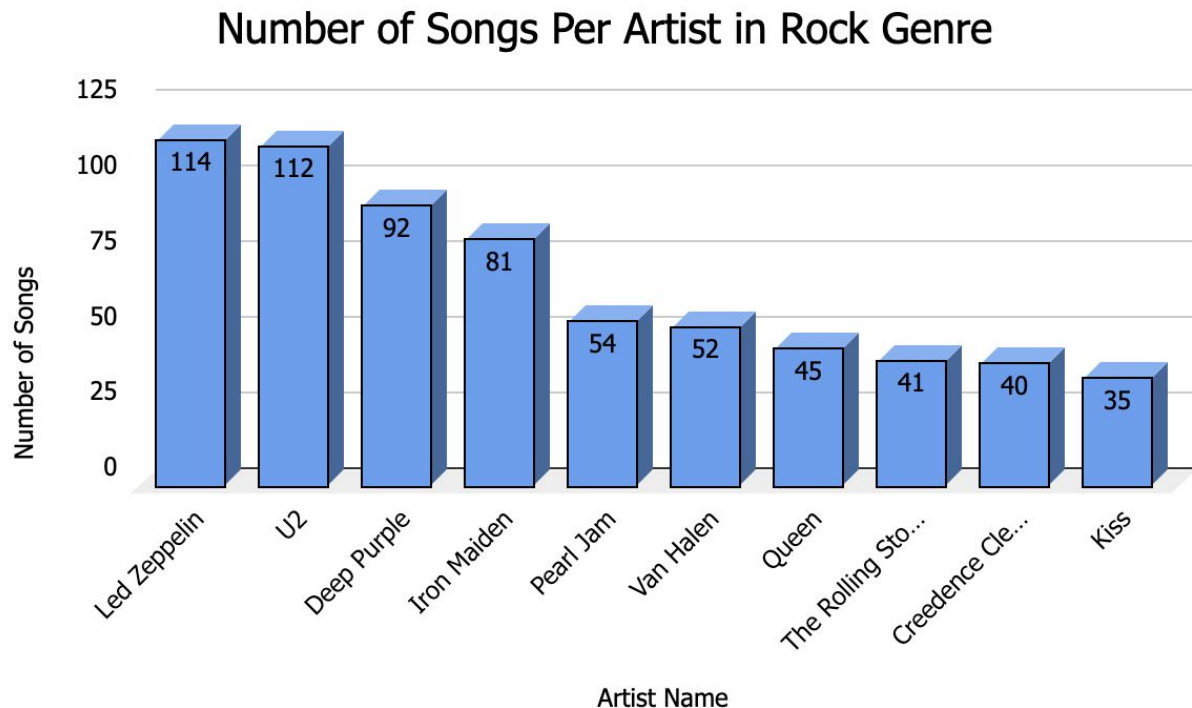
We want to find out the most popular music Genre for each country



Here we can see where the most purchases by Genre occurred – we can see by the map the USA is the most popular. While this isn't the best visual to see which genre is which...I really wanted to do a geo map

```
with total as (  
  select  
    country,  
    g.name as name,  
    g.genreid as id,  
    sum(quantity) as purchases  
  from invoice i  
  join invoiceitem il  
  on il.invoiceid = i.invoiceid  
  join track t  
  on t.trackid = il.trackid  
  join genre g  
  on g.genreid = t.genreid  
  join customer c  
  on c.customerid = i.customerid  
  group by 1,2,3  
)  
  
select  
  country,  
  name,  
  id,  
  purchases  
from total a  
where purchases = (select MAX(purchases)from total  
                   where total.country = a.country)  
order by country
```

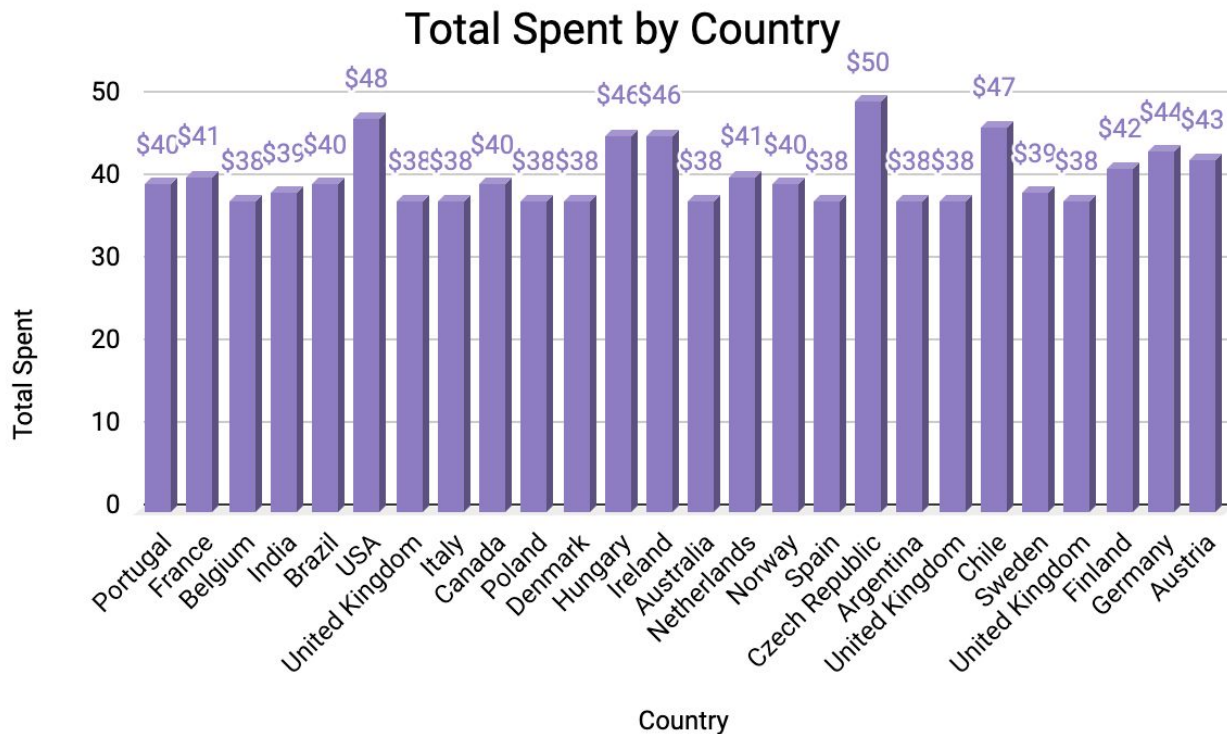
Who is writing the rock music?



Here we can see which artist has written the most Rock songs for the top 10 artists – Led Zeppelin is the winner!

```
select
a.artistid,
a.name,
count(trackid)songs
from artist a
join album al
on a.artistid = al.artistid
join track t
on t.albumid = al.albumid
join genre g
on g.genreid = t.genreid
where g.name = 'Rock'
group by 1,2
order by songs desc
limit 10
```

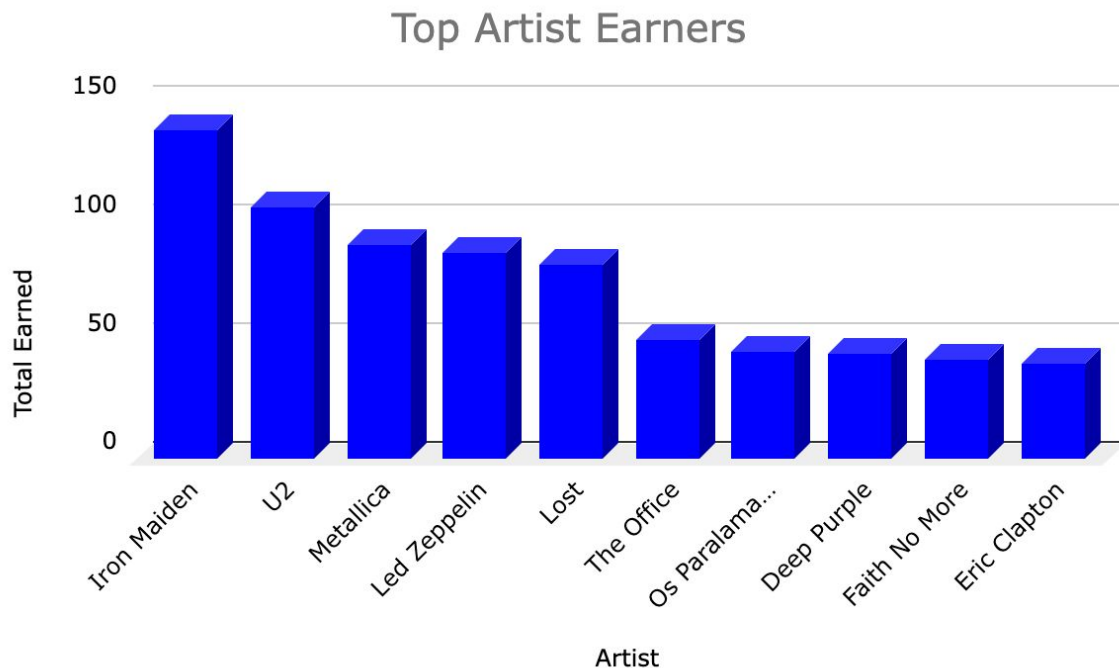
Write a query that determines the customer that has spent the most on music for each



The USA and Czech Republic are our big spenders!

```
with totals as (  
  select  
    country,  
    firstname,  
    lastname,  
    c.customerid,  
    sum(total) total_spent  
  from customer c  
  join invoice i  
  on c.customerid = i.customerid  
  group by 1,2,3,4  
)  
  
select  
  country,  
  firstname,  
  lastname,  
  customerid,  
  total_spent  
from totals t  
where total_spent =  
  (select MAX(total_spent) from totals  
   where totals.country=t.country)
```

Who are the top 10 artists according to InvoiceLines?



```
select
a.name,
sum(quantity*il.unitprice) total
from artist a
join album al
on a.artistid = al.artistid
join track t
on t.albumid = al.albumid
join invoice line il
on il.trackid = t.trackid
group by 1
order by 2 desc
limit 10
```

Iron Maiden is our top artist! We can see the rest of the 10 top artists in order behind it!