SQL

ARTWORK

ANALYSIS

20 PRACTICE QUESTIONS

```sql
1 • create schema university;
2 • select * from university.artworks;
3
4   #1. List All Artworks
5 • select * from university.artworks;
6
7   #2. Find All Artworks by Otto Wagner
8 • select * from university.artworks
9   where Artist = 'Otto Wagner';
10
```

```sql
11    #3. Retrieve Artworks Created in the 20th Century
12 •  select * from university.artworks
13    where Date between 1900 and 1999;
14
15    #4. Get Unique Artists
16 •  select distinct Artist from university.artworks;
17
18    #5. Count the Number of Artworks in the Dataset
19 •  select count(*) from university.artworks;
20
```

```sql
21   #6. List Artworks Where Medium Contains 'Ink'
22 • select * from university.artworks
23   where Medium like '%Ink%';
24
25   #7. Find Artworks by Artists Born Before 1900
26 • select * from university.artworks
27   where BeginDate <1900;
28
29   #8. Count Artworks Grouped by Nationality
30 • select Nationality , count(Nationality)
31   from university.artworks
32   group by Nationality;
33
```

```
34    #9. Get Artworks with a Height Greater Than 50 cm
35 •  select * from university.artworks
36    where `Height (cm)` > 50;
37
38    #10. Find Artworks Not on View
39 •  select * from university.artworks
40    where OnView is null;
41
```

```sql
42    #11. List Top 5 Most Common Mediums Used
43 •  select Medium , count(Medium) as Count
44    from university.artworks
45    group by Medium
46    order by Count desc
47    limit 5;
48
49    #12. Retrieve Artworks with Missing Depth
50 •  select * from university.artworks
51    where `Depth (cm)` is null;
52
```

```sql
53    #13. Find Artists with More Than 3 Artworks
54 •  select Artist , count(Artist) as Count
55    from university.artworks
56    group by Artist
57    having Count >3;
58
59    #14. Calculate Average Height of Artworks by Artist
60 •  select Artist , avg(`Height (cm)`)
61    from university.artworks
62    group by Artist;
63
```

```sql
#15. List Artworks with More Than One Medium Mentioned
select * from university.artworks
where Medium like '%,%';

#16. Retrieve Artworks Created by Female Artists
select * from university.artworks
where Gender = '(female)';

#17. Find the Latest Created Artwork
select * from university.artworks
order by Date desc
limit 1;
```

```sql
#18. List Artworks by Artists Austrian Nationalities
select * from university.artworks
where Nationality = '(Austrian)';

#19. Identify Artworks by Artists Born in the Same Year
select Artist , BeginDate
from university.artworks
group by Artist , BeginDate
having count(Artist) > 1;
```

```sql
87    #20. Calculate Total Number of Artworks for Each Century
88 •  select
89 ⊖    case
90        when date < 1800 then '18th century or earlier'
91        when date between 1800 and 1899 then '19th century'
92        when date between 1900 and 1999 then '20th century'
93        else '21st century'
94      end as century,
95      count(*) as total_artworks
96    from university.artworks
97    group by century;
98
```