

--Prepare Phase--

```
select
ride_id,
rideable_type,
started_at,
ended_at,
start_station_name,
end_station_name,
member_casual
    from dbo.[202406]
union all
```

```
select
ride_id,
rideable_type,
started_at,
ended_at,
start_station_name,
end_station_name,
member_casual
    from dbo.[202408]
union all
```

```
select
ride_id,
rideable_type,
started_at,
ended_at,
start_station_name,
end_station_name,
member_casual
    from dbo.[202409]
union all
```

```
select
ride_id,
rideable_type,
started_at,
ended_at,
start_station_name,
end_station_name,
member_casual
    from dbo.[202410]
union all
```

```
select
ride_id,
rideable_type,
started_at,
ended_at,
start_station_name,
end_station_name,
member_casual
    from dbo.[202411]
union all
```

```
select
```

```
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202412]  
    union all
```

```
select  
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202501]  
    union all
```

```
select  
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202502]  
    union all
```

```
select  
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202503]  
    union all
```

```
select  
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202504]  
    union all
```

```
select  
ride_id,  
rideable_type,  
started_at,
```

```
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
    from dbo.[202505]
```

--Process Phase--

--Identify and Remove Null Values--

```
select *  
from dbo.Cyclistic_bike  
where  
ride_id is null  
or rideable_type is null  
or start_station_name is null  
or started_at is null  
or ended_at is null  
or end_station_name is null  
or member_casual is null;
```

```
delete from dbo.Cyclistic_bike  
where  
ride_id is null  
or rideable_type is null  
or start_station_name is null  
or started_at is null  
or ended_at is null  
or end_station_name is null  
or member_casual is null;
```

-- Identify and remove duplicate values --

```
select *,  
count(*) as duplicatecount  
from Cyclistic_bike  
group by  
ride_id,  
rideable_type,  
started_at,  
ended_at,  
start_station_name,  
end_station_name,  
member_casual  
having COUNT(*) >1;
```

--Analyse Phase--

-- Riders by members and casual users --

```
USE Cyclistic_Bike_Share;  
GO
```

```
SELECT  
    member_casual,  
    COUNT(ride_id) AS no_of_rides  
FROM dbo.Cyclistic_bike
```

```

GROUP BY member_casual;

-- rideable_type by members and casual users --

select
member_casual,
rideable_type,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
rideable_type
order by
no_of_riders desc;

-- Mostly used start station by members and casual riders --
select top 10
start_station_name,
member_casual,
COUNT(ride_id) AS no_of_riders
from dbo.Cyclistic_bike
group by
start_station_name,
member_casual
order by
no_of_riders desc;

-- Mostly used start station by members and casual riders --
select top 10
end_station_name,
member_casual,
COUNT(ride_id) AS no_of_riders
from dbo.Cyclistic_bike
group by
end_station_name,
member_casual
order by
no_of_riders desc;

-- Started time analysis by member and casual riders --

--Monthly analysis --
select
member_casual,
DATEPART(MONTH, started_at) as started_month,
--DATEPART(WEEKDAY, started_at) as started_day,
--DATEPART(HOUR, started_at) as started_hour,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
DATEPART(MONTH, started_at)
order by
no_of_riders desc;

--Daily Analysis--
select
member_casual,

```

```

--DATEPART(MONTH, started_at) as started_month,
DATEPART(WEEKDAY, started_at) as started_day,
--DATEPART(HOUR, started_at) as started_hour,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
DATEPART(WEEKDAY, started_at)
order by
no_of_riders desc;

--Hourly analysis --
select
member_casual,
--DATEPART(MONTH, started_at) as started_month,
--DATEPART(WEEKDAY, started_at) as started_day,
DATEPART(HOUR, started_at) as started_hour,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
DATEPART(HOUR, started_at)
order by
no_of_riders desc;

-- Ended time analysis by member and casual riders --

--Monthly analysis --
select
member_casual,
DATEPART(MONTH, ended_at) as ended_month,
--DATEPART(WEEKDAY, started_at) as started_day,
--DATEPART(HOUR, started_at) as started_hour,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
DATEPART(MONTH, ended_at)
order by
no_of_riders desc;

--Daily Analysis--
select
member_casual,
--DATEPART(MONTH, started_at) as started_month,
DATEPART(WEEKDAY, ended_at) as ended_day,
--DATEPART(HOUR, started_at) as started_hour,
COUNT(ride_id) as no_of_riders
from dbo.Cyclistic_bike
group by
member_casual,
DATEPART(WEEKDAY, ended_at)
order by
no_of_riders desc;

--Hourly analysis --
select
member_casual,

```

```
--DATEPART(MONTH, started_at) as started_month,  
--DATEPART(WEEKDAY, started_at) as started_day,  
DATEPART(HOUR, ended_at) as ended_hour,  
COUNT(ride_id) as no_of_riders  
from dbo.Cyclistic_bike  
group by  
member_casual,  
DATEPART(HOUR, ended_at)  
order by  
no_of_riders desc;
```