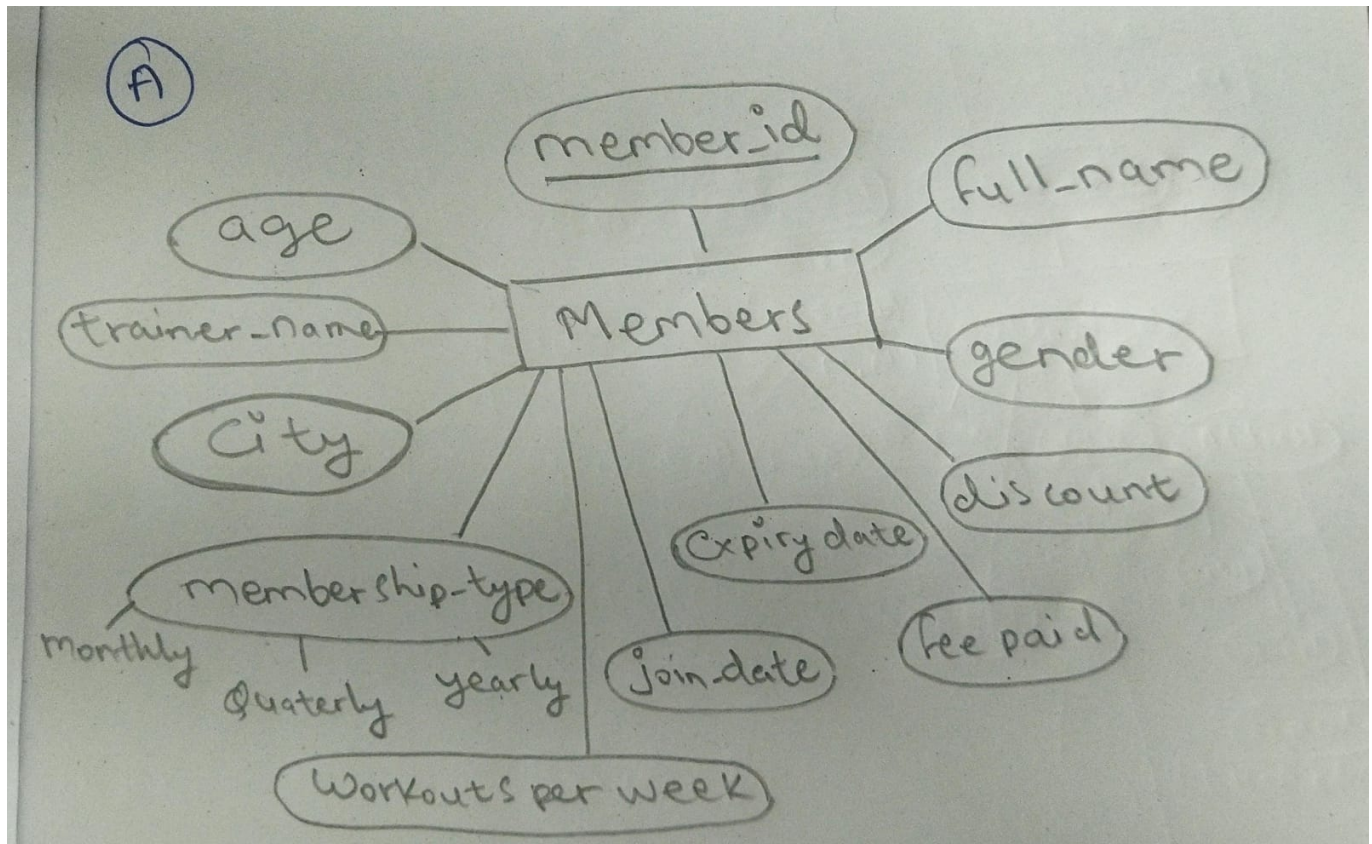


Gym Membership Management

ER diagram



- Part A

```
Worksheet | Query Builder
create table members(
  member_id number primary key,
  full_name varchar2(100),
  gender varchar2(1),
  age number,
  city varchar2(50),
  membership_type varchar2(50),
  join_date date,
  expiry_date date,
  fee_paid number,
  discount number,
  workouts_per_week number,
  trainer_name varchar2(100)
);
```

Script Output x Query Result x

SQL | All Rows Fetched: 0 in 0.036 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERS...	JOIN_DATE	EXPIRY_D...	FEE_PAID	DISCOUNT	WORKOU...	TRAINER...
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- Part B

Script Output x Query Result 2 x

SQL | All Rows Fetched: 15 in 0.01 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	1 rahul sharma	m	25	delhi	yearly	10-01-24	10-01-25	15000	1000		5 arjun singh
2	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500		6 sneha reddy
3	3 amit verma	m	32	mumbai	monthly	15-03-24	15-04-24	2000	200		3 karan patel
4	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14000	0		4 sunita mehta
5	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400		6 ravi kumar
6	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100		3 rohit das
7	7 vikram singh	m	35	jaipur	yearly	25-01-24	25-01-25	16000	1200		4 ajay chauhan
8	8 meera nair	f	31	kochi	quarterly	12-11-23	12-02-24	5500	300		6 divya menon
9	9 rohan joshi	m	24	pune	monthly	01-07-24	01-08-24	1900	0		2 akhil kulkarni
10	10 kavya deshमुख	f	26	nagpur	yearly	18-08-24	18-08-25	15500	1000		5 shreya more
11	11 arjun rao	m	30	bangalore	quarterly	22-04-24	22-07-24	6200	500		7 vikas gowda
12	12 isha Kapoor	f	23	delhi	monthly	01-09-24	01-10-24	2000	150		3 anil thakur
13	13 manish yadav	m	34	patna	yearly	28-03-24	28-03-25	14500	0		4 alok kumar
14	14 ritu saxena	f	29	kanpur	quarterly	05-02-24	05-05-24	5800	400		6 poonam sharma
15	15 devendra joshi	m	27	ahmedabad	monthly	11-05-24	11-06-24	2100	200		2 chirag shah

```

update members
set fee_paid = fee_paid + (0.05)*fee_paid
where membership_type = 'yearly';

select * from members;

```

Script Output x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 15 in 0.006 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	1 rahul sharma	m	25	delhi	yearly	10-01-24	10-01-25	15750	1000		5 arjun singh
2	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500		6 sneha reddy
3	3 amit verma	m	32	mumbai	monthly	15-03-24	15-04-24	2000	200		3 karan patel
4	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14700	0		4 sunita mehta
5	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400		6 ravi kumar
6	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100		3 rohit das
7	7 vikram singh	m	35	jaipur	yearly	25-01-24	25-01-25	16800	1200		4 ajay chauhan
8	8 meera nair	f	31	kochi	quarterly	12-11-23	12-02-24	5500	300		6 divya menon

```

delete from members
where membership_type = 'monthly' and fee_paid < 1000;

select * from members;

```

Script Output x Query Result 2 x Query Result 3 x Query Result 4 x Query Result 5 x

SQL | All Rows Fetched: 15 in 0.005 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	1 rahul sharma	m	25	delhi	yearly	10-01-24	10-01-25	15750	1000		5 arjun singh
2	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500		6 sneha reddy
3	3 amit verma	m	32	mumbai	monthly	15-03-24	15-04-24	2000	200		3 karan patel
4	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14700	0		4 sunita mehta
5	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400		6 ravi kumar
6	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100		3 rohit das
7	7 vikram singh	m	35	jaipur	yearly	25-01-24	25-01-25	16800	1200		4 ajay chauhan
8	8 meera nair	f	31	kochi	quarterly	12-11-23	12-02-24	5500	300		6 divya menon
9	9 rohan joshi	m	24	pune	monthly	01-07-24	01-08-24	1900	0		2 akhil kulkarni
10	10 kavya deshमुख	f	26	nagpur	yearly	18-08-24	18-08-25	16275	1000		5 shreya more

```

create table stg_members(
  member_id number,
  city varchar2(100),
  trainer_name varchar2(100)
);

select * from stg_members;
select * from members;

```

Script Output x Query Result 2 x Query Result 3 x Query Result 4 x Query Result 5 x Query Result 6 x

SQL | All Rows Fetched: 0 in 0.007 seconds

MEMBER_ID	CITY	TRAINER...
-----------	------	------------

• Part C

select * from members
where city = 'hyderabad' and membership_type = 'yearly';

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 0 in 0.048 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
-----------	-----------	--------	-----	------	-----------------	-----------	-------------	----------	----------	-------------------	--------------

select * from members
where age >= 20 and age <= 30;

Script Output x Query Result x

SQL | All Rows Fetched: 16 in 0.01 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	1 rahul sharma	m	25	gurgaon	yearly	10-01-24	10-01-25	15750	1000	5	manoj sharma
2	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500	6	sneha reddy
3	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14700	0	4	sunita mehta
4	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400	6	ravi kumar
5	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100	3	rohit das
6	9 rohan joshi	m	24	pune	monthly	01-07-24	01-08-24	1900	0	2	akhil kulkarni
7	10 kavya deshमुख	f	26	aurangabad	yearly	18-08-24	18-08-25	16275	1000	5	namrata joshi
8	11 arjun rao	m	30	bangalore	quarterly	22-04-24	22-07-24	6200	500	7	vikas gowda
9	12 isha Kapoor	f	23	delhi	monthly	01-09-24	01-10-24	2000	150	3	anil thakur
10	14 ritu saxena	f	29	kanpur	quarterly	05-02-24	05-05-24	5800	400	6	poonam sharma
11	15 devendra joshi	m	27	ahmedabad	monthly	11-05-24	11-06-24	2100	200	2	chirag shah
12	23 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100	3	mehul patel
13	21 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100	3	anita shah
14	20 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100	3	rahul chauhan
15	22 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100	3	arvind menon
16	24 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100	3	navneet kaur

select * from members
where city = 'hyderabad' or city = 'chennai' or city = 'delhi';

Script Output x Query Result x

SQL | All Rows Fetched: 3 in 0.008 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500	6	sneha reddy
2	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400	6	ravi kumar
3	12 isha Kapoor	f	23	delhi	monthly	01-09-24	01-10-24	2000	150	3	anil thakur

select * from members
where upper(full_name) like 'A%';

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 3 in 0.011 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	3 amit verma	m	32	thane	monthly	15-03-24	15-04-24	2000	200	3	deepak jadhav
2	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100	3	rohit das
3	11 arjun rao	m	30	bangalore	quarterly	22-04-24	22-07-24	6200	500	7	vikas gowda

select distinct membership_type
from members;

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 3 in 0.006 seconds

MEMBERSHIP_TYPE
1 yearly
2 quarterly
3 monthly

select * from members
order by fee_paid desc;

Script Output x Query Result x

SQL | All Rows Fetched: 20 in 0.008 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	7 vikram singh	m	35	udaipur	yearly	25-01-24	25-01-25	16800	1200		4 lokesh singh
2	10 kavya deshमुख	f	26	aurangabad	yearly	18-08-24	18-08-25	16275	1000		5 namrata joshi
3	1 rahul sharma	m	25	gurgaon	yearly	10-01-24	10-01-25	15750	1000		5 manoj sharma
4	13 manish yadav	m	34	gaya	yearly	28-03-24	28-03-25	15225	0		4 santosh yadav
5	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14700	0		4 sunita mehta
6	11 arjun rao	m	30	bangalore	quarterly	22-04-24	22-07-24	6200	500		7 vikas gowda
7	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400		6 ravi kumar
8	14 ritu saxena	f	29	kanpur	quarterly	05-02-24	05-05-24	5800	400		6 poonam sharma
9	8 meera nair	f	31	kochi	quarterly	12-11-23	12-02-24	5500	300		6 divya menon
10	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500		6 sneha reddy
11	15 devendra joshi	m	27	ahmedabad	monthly	11-05-24	11-06-24	2100	200		2 chirag shah
12	12 isha Kapoor	f	23	delhi	monthly	01-09-24	01-10-24	2000	150		3 anil thakur
13	3 amit verma	m	32	thane	monthly	15-03-24	15-04-24	2000	200		3 deepak jadhav
14	9 rohan joshi	m	24	pune	monthly	01-07-24	01-08-24	1900	0		2 akhil kulkarni
15	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100		3 rohit das
16	22 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 arvind menon
17	20 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 rahul chauhan
18	21 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 anita shah
19	24 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 navneet kaur

Worksheet Query Builder

select * from members
order by city asc, age desc;

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 20 in 0.008 seconds

MEMBER_ID	FULL_NAME	GENDER	AGE	CITY	MEMBERSHIP_TYPE	JOIN_DATE	EXPIRY_DATE	FEE_PAID	DISCOUNT	WORKOUTS_PER_WEEK	TRAINER_NAME
1	15 devendra joshi	m	27	ahmedabad	monthly	11-05-24	11-06-24	2100	200		2 chirag shah
2	10 kavya deshमुख	f	26	aurangabad	yearly	18-08-24	18-08-25	16275	1000		5 namrata joshi
3	11 arjun rao	m	30	bangalore	quarterly	22-04-24	22-07-24	6200	500		7 vikas gowda
4	2 priya iyer	f	28	chennai	quarterly	05-12-23	05-03-24	5000	500		6 sneha reddy
5	12 isha Kapoor	f	23	delhi	monthly	01-09-24	01-10-24	2000	150		3 anil thakur
6	13 manish yadav	m	34	gaya	yearly	28-03-24	28-03-25	15225	0		4 santosh yadav
7	1 rahul sharma	m	25	gurgaon	yearly	10-01-24	10-01-25	15750	1000		5 manoj sharma
8	5 sandeep reddy	m	29	hyderabad	quarterly	10-06-24	10-09-24	6000	400		6 ravi kumar
9	14 ritu saxena	f	29	kanpur	quarterly	05-02-24	05-05-24	5800	400		6 poonam sharma
10	8 meera nair	f	31	kochi	quarterly	12-11-23	12-02-24	5500	300		6 divya menon
11	6 ananya banerjee	f	27	kolkata	monthly	14-02-24	14-03-24	1800	100		3 rohit das
12	23 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 mehul patel
13	22 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 arvind menon
14	20 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 rahul chauhan
15	21 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 anita shah
16	24 temp joshi	m	25	kurnool	monthly	01-09-25	01-10-25	999	100		3 navneet kaur
17	4 neha gupta	f	22	lucknow	yearly	20-05-24	20-05-25	14700	0		4 sunita mehta
18	9 rohan joshi	m	24	pune	monthly	01-07-24	01-08-24	1900	0		2 akhil kulkarni
19	3 amit verma	m	32	thane	monthly	15-03-24	15-04-24	2000	200		3 deepak jadhav

select count(*) from members;

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.005 seconds

COUNT(*)	
1	20

select min(fee_paid), max(fee_paid), avg(fee_paid) from members;

select * from stg_members;

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.005 seconds

MIN(FEE_PAID)	MAX(FEE_PAID)	AVG(FEE_PAID)	
1	999	16800	6102.25

select sum(discount) from members;

select * from sta members;

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.004 seconds

SUM(DISCOUNT)
1 6450

select city, count(*) as total_members
from members
group by city
order by total_members desc;

Script Output x Query Result x

SQL | All Rows Fetched: 16 in 0.008 seconds

CITY	TOTAL_MEMBERS
1 kurnool	5
2 thane	1
3 lucknow	1
4 hyderabad	1
5 kolkata	1
6 udaipur	1
7 kochi	1
8 pune	1
9 aurangabad	1
10 bangalore	1
11 delhi	1
12 gaya	1
13 kanpur	1
14 ahmedabad	1
15 gurgaon	1
16 chennai	1

select distinct membership_type, avg(fee_paid) as avg_fee
from members
group by membership_type
order by avg_fee desc;

Script Output x Query Result x

SQL | All Rows Fetched: 3 in 0.007 seconds

MEMBERSHIP_TYPE	AVG_FEE
1 yearly	15750
2 quarterly	5700
3 monthly	1479.5

select trainer_name, sum(workouts_per_week) as total_workouts
from members
group by trainer_name
order by total_workouts desc;

Script Output x Query Result x

SQL | All Rows Fetched: 20 in 0.006 seconds

TRAINER_NAME	TOTAL_WORKOUTS
1 vikas gowda	7
2 divya menon	6
3 sneha reddy	6
4 poonam sharma	6
5 ravi kumar	6
6 manoj sharma	5
7 namrata joshi	5
8 santosh yadav	4
9 lokesh singh	4
10 sunita mehta	4
11 anil thakur	3
12 navneet kaur	3
13 rohit das	3
14 deepak jadhav	3
15 arvind menon	3
16 mehul patel	3
17 anita shah	3

SQL Query 1:

```
select city, count(*) as city_members
from members
group by city
order by city_members desc;
```

Query Result: All Rows Fetched: 16 in 0.006 seconds

CITY	CITY_MEMBERS
1 kurnool	5
2thane	1
3 lucknow	1
4 hyderabad	1
5 kolkata	1
6 udaipur	1
7 kochi	1
8 pune	1
9 aurangabad	1
10 bangalore	1
11 delhi	1
12 gaya	1
13 kanpur	1
14 ahmedabad	1
15 gurgaon	1
16 chennai	1

SQL Query 2:

```
select city, count(*) as city_members
from members
group by city
having count(*) > 3
order by city_members desc;
```

Query Result: All Rows Fetched: 1 in 0.005 seconds

CITY	CITY_MEMBERS
1 kurnool	5

SQL Query 3:

```
select membership_type, avg(fee_paid) as avg_fee
from members
group by membership_type
having avg(fee_paid) > 3000
order by avg_fee desc;
```

Query Result: All Rows Fetched: 2 in 0.006 seconds

MEMBERSHIP_TYPE	AVG_FEE
1 yearly	15750
2 quarterly	5700

SQL Query 4:

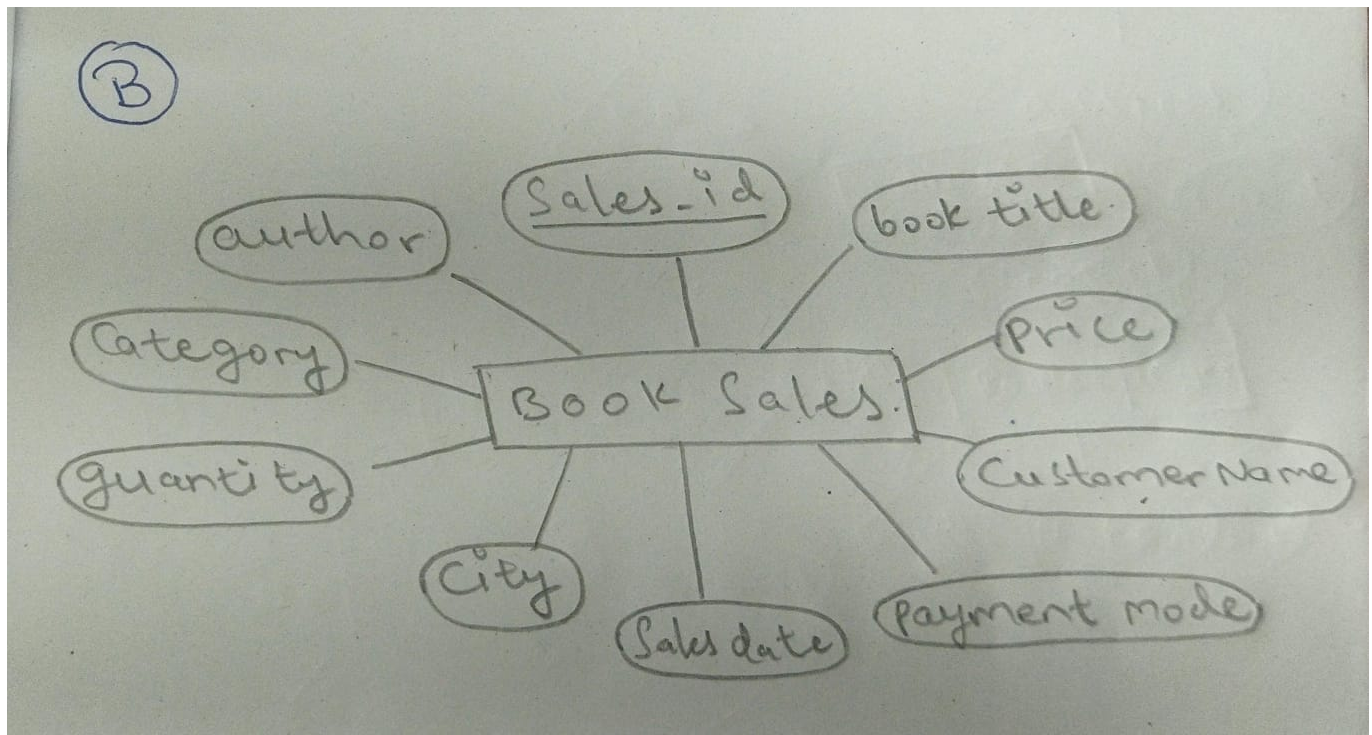
```
select trainer_name, sum(workouts_per_week) as sum_workouts
from members
group by trainer_name
having sum(workouts_per_week) > 5
order by sum_workouts
```

Query Result: All Rows Fetched: 5 in 0.006 seconds

TRAINER_NAME	SUM_WORKOUTS
1 sneha reddy	6
2 ravi kumar	6
3 poonam sharma	6
4 divya menon	6
5 vikas gowda	7

Book Store Management

ER Diagram



- Part A

```
create table book_sales (  
  sale_id number primary key,  
  book_title varchar2(200),  
  author varchar2(100),  
  category varchar2(50),  
  price number(10,2),  
  quantity number,  
  customer_name varchar2(100),  
  city varchar2(100),  
  sale_date date,  
  payment_mode varchar2(20)  
);
```

ipt Output x Query Result x

SQL | All Rows Fetched: 0 in 0.009 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER...	CITY	SALE_DATE	PAYMENT...
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- Part B

insert into book_sales values (6, 'pride and prejudice', 'jane austen', 'novel', 600, 2, 'ananya banerjee', 'kolkata', date '2024-01-18', 'card');

Script Output x Query Result x Query Result 1 x

SQL | All Rows Fetched: 15 in 0.001 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	1 data structures in c	eshwar reddy	textbook	450	2	rahul sharma	delhi	05-01-24	card
2	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
3	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
4	4 indian history	ram gupta	textbook	500	4	neha gupta	lucknow	14-01-24	card
5	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
6	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
7	7 chemistry essentials	s.k. bansal	textbook	400	5	vikram singh	jaipur	20-01-24	upi
8	8 data analytics handbook	s. agarwal	science	950	1	meera nair	kochi	22-01-24	cash
9	9 wings of fire	a.p.j. abdul kalam	novel	300	6	rohan joshi	pune	25-01-24	upi
10	10 c programming made easy	balagurusamy	textbook	420	2	kavya deshमुख	nagpur	26-01-24	card
11	11 demo book	demo author	fiction	200	1	demo user	democity	27-01-24	cash
12	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
13	13 biology concepts	meenakshi prasad	textbook	380	3	isha Kapoor	delhi	29-01-24	card
14	14 data mining essentials	rajat sharma	science	720	1	manish yadav	patna	01-02-24	upi
15	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash

```

update book_sales
set price = price * 1.10
where category = 'textbook';

select * from book_sales;

```

Script Output x Query Result x Query Result 1 x Query Result 2 x

SQL | All Rows Fetched: 15 in 0.001 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	1 data structures in c	eshwar reddy	textbook	495	2	rahul sharma	delhi	05-01-24	card
2	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
3	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
4	4 indian history	ram gupta	textbook	550	4	neha gupta	lucknow	14-01-24	card
5	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
6	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
7	7 chemistry essentials	s.k. bansal	textbook	440	5	vikram singh	jaipur	20-01-24	upi
8	8 data analytics handbook	s. agarwal	science	950	1	meera nair	kochi	22-01-24	cash
9	9 wings of fire	a.p.j. abdul kalam	novel	300	6	rohan joshi	pune	25-01-24	upi
10	10 c programming made easy	balagurusamy	textbook	462	2	kavya deshमुख	nagpur	26-01-24	card
11	11 demo book	demo author	fiction	200	1	demo user	democity	27-01-24	cash
12	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
13	13 biology concepts	meenakshi prasad	textbook	418	3	isha Kapoor	delhi	29-01-24	card
14	14 data mining essentials	rajat sharma	science	720	1	manish yadav	patna	01-02-24	upi
15	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash


```

delete from book_sales
where city = 'democity';

select * from book_sales;

```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x

SQL | All Rows Fetched: 14 in 0.002 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	1 data structures in c	eshwar reddy	textbook	495	2	rahul sharma	delhi	05-01-24	card
2	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
3	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
4	4 indian history	ram gupta	textbook	550	4	neha gupta	lucknow	14-01-24	card
5	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
6	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
7	7 chemistry essentials	s.k. bansal	textbook	440	5	vikram singh	jaipur	20-01-24	upi
8	8 data analytics handbook	s. agarwal	science	950	1	meera nair	kochi	22-01-24	cash
9	9 wings of fire	a.p.j. abdul kalam	novel	300	6	rohan joshi	pune	25-01-24	upi
10	10 c programming made easy	balagurusamy	textbook	462	2	kavya deshमुख	nagpur	26-01-24	card
11	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
12	13 biology concepts	meenakshi prasad	textbook	418	3	isha Kapoor	delhi	29-01-24	card
13	14 data mining essentials	rajat sharma	science	720	1	manish yadav	patna	01-02-24	upi
14	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash

```

create table stg_book_sales (
    customer_name varchar2(100),
    city varchar2(100)
);

insert into stg_book_sales values ('isha Kapoor', 'bhopal');
insert into stg_book_sales values ('rahul sharma', 'gurgaon');
insert into stg_book_sales values ('new customer', 'surat');

merge into book_sales bs
using stg_book_sales s
on (bs.customer_name = s.customer_name)
when matched then
    update set bs.city = s.city
when not matched then
    insert (sale_id, book_title, author, category, price, quantity, customer_name, city, sale_date, payment_mode)
    values (
        (select nvl(max(sale_id),0)+1 from book_sales),
        'new book', 'unknown author', 'fiction', 300, 1,
        s.customer_name, s.city, sysdate, 'upi'
    );

```

• Part C

```

select * from book_sales
where category = 'fiction' and price > 500;

```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 2 in 0.013 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
2	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi

```

select * from book_sales
where quantity between 2 and 5;

select * from book_sales;

```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 9 in 0.014 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	1 data structures in c	eshwar reddy	textbook	495	2	rahul sharma	gurgaon	05-01-24	card
2	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
3	4 indian history	ram gupta	textbook	550	4	neha gupta	lucknow	14-01-24	card
4	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
5	7 chemistry essentials	s.k. bansal	textbook	440	5	vikram singh	jaipur	20-01-24	upi
6	10 c programming made easy	balagurusamy	textbook	462	2	kavya deshमुख	nagpur	26-01-24	card
7	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
8	13 biology concepts	meenakshi prasad	textbook	418	3	isha Kapoor	bhopal	29-01-24	card
9	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash

```
select * from book_sales
where city in ('hyderabad','chennai','bengaluru');

select * from book_sales;
```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 3 in 0.013 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
2	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
3	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi

```
select distinct category from book_sales;

select * from book_sales;
```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 4 in 0.007 seconds

CATEGORY
1 textbook
2 science
3 fiction
4 novel

```
select * from book_sales
order by price desc;

select * from book_sales;
```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 15 in 0.008 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	8 data analytics handbook	s. agarwal	science	950	1	meera nair	kochi	22-01-24	cash
2	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
3	14 data mining essentials	rajat sharma	science	720	1	manish yadav	patna	01-02-24	upi
4	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
5	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
6	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
7	4 indian history	ram gupta	textbook	550	4	neha gupta	lucknow	14-01-24	card
8	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
9	1 data structures in c	eshwar reddy	textbook	495	2	rahul sharma	gurgaon	05-01-24	card
10	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash
11	10 c programming made easy	balagurusamy	textbook	462	2	kavya deshमुख	nagpur	26-01-24	card
12	7 chemistry essentials	s.k. bansal	textbook	440	5	vikram singh	jaipur	20-01-24	upi
13	13 biology concepts	meenakshi prasad	textbook	418	3	isha Kapoor	bhopal	29-01-24	card
14	16 new book	unknown author	fiction	300	1	new customer	surat	02-09-25	upi
15	9 wings of fire	a.p.j. abdul kalam	novel	300	6	rohan joshi	pune	25-01-24	upi

```
select * from book_sales
order by category asc, price desc;

select * from book_sales;
```

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 15 in 0.007 seconds

SALE_ID	BOOK_TITLE	AUTHOR	CATEGORY	PRICE	QUANTITY	CUSTOMER_NAME	CITY	SALE_DATE	PAYMENT_MODE
1	12 atomic habits	james clear	fiction	650	2	arjun rao	bengaluru	28-01-24	upi
2	3 the alchemist	paulo coelho	fiction	550	3	amit verma	mumbai	12-01-24	cash
3	16 new book	unknown author	fiction	300	1	new customer	surat	02-09-25	upi
4	6 pride and prejudice	jane austen	novel	600	2	ananya banerjee	kolkata	18-01-24	card
5	15 the white tiger	aravind adiga	novel	480	2	ritu saxena	kanpur	03-02-24	cash
6	9 wings of fire	a.p.j. abdul kalam	novel	300	6	rohan joshi	pune	25-01-24	upi
7	8 data analytics handbook	s. agarwal	science	950	1	meera nair	kochi	22-01-24	cash
8	5 fundamentals of physics	resnick halliday	science	800	1	sandeep reddy	hyderabad	16-01-24	upi
9	14 data mining essentials	rajat sharma	science	720	1	manish yadav	patna	01-02-24	upi
10	2 machine learning basics	alok mehta	science	700	1	priya iyer	chennai	08-01-24	upi
11	4 indian history	ram gupta	textbook	550	4	neha gupta	lucknow	14-01-24	card
12	1 data structures in c	eshwar reddy	textbook	495	2	rahul sharma	gurgaon	05-01-24	card
13	10 c programming made easy	balagurusamy	textbook	462	2	kavya deshमुख	nagpur	26-01-24	card
14	7 chemistry essentials	s.k. bansal	textbook	440	5	vikram singh	jaipur	20-01-24	upi
15	13 biology concepts	meenakshi prasad	textbook	418	3	isha Kapoor	bhopal	29-01-24	card

select count(*) as total_sales from book_sales;

select * from book_sales;

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 1 in 0.004 seconds

TOTAL_SALES
15

select max(price) as highest_price, min(price) as lowest_price, avg(price) as avg_price from book_sales;

select * from book_sales;

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 1 in 0.004 seconds

HIGHEST_PRICE	LOWEST_PRICE	AVG_PRICE
950	300	561

select sum(quantity) as total_science_books from book_sales where category = 'science';

select * from book_sales;

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 1 in 0.009 seconds

TOTAL_SCIENCE_BOOKS
4

select category, sum(quantity) as total_quantity from book_sales group by category;

select * from book_sales;

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 4 in 0.01 seconds

CATEGORY	TOTAL_QUANTITY
1 textbook	16
2 science	4
3 fiction	6
4 novel	10

select city, sum(price * quantity) as total_revenue from book_sales group by city;

select * from book_sales;

Script Output x Query Result x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x

SQL | All Rows Fetched: 15 in 0.008 seconds

CITY	TOTAL_REVENUE
1 gurgaon	990
2 chennai	700
3 mumbai	1650
4 lucknow	2200
5 hyderabad	800
6 kolkata	1200
7 jaipur	2200
8 kochi	950
9 pune	1800
10 nagpur	924
11 surat	300
12 bengaluru	1300
13 bhopal	1254
14 patna	720
15 kanpur	960

```
select category, sum(quantity) as total_quantity
from book_sales
group by category
having sum(quantity) > 20;

select * from book_sales;
```

Script Output x | Query Result x | Query Result 1 x | Query Result 2 x | Query Result 3 x | Query Result 4 x

SQL | All Rows Fetched: 0 in 0.008 seconds

CATEGORY	TOTAL_Q...
----------	------------

```
select city, avg(price) as avg_price
from book_sales
group by city
having avg(price) > 400;

select * from book_sales;
```

Script Output x | Query Result x | Query Result 1 x | Query Result 2 x | Query Result 3 x | Query Result 4 x

SQL | All Rows Fetched: 13 in 0.013 seconds

CITY	AVG_PRICE
1 gurgaon	495
2 chennai	700
3 mumbai	550
4 lucknow	550
5 hyderabad	800
6 kolkata	600
7 jaipur	440
8 kochi	950
9 nagpur	462
10 bengaluru	650
11 bhopal	418
12 patna	720
13 kanpur	480

```
select payment_mode, max(price) as max_price
from book_sales
group by payment_mode
having max(price) >= 800;

select * from book_sales;
```

Script Output x | Query Result x | Query Result 1 x | Query Result 2 x | Query Result 3 x | Query Result 4 x

SQL | All Rows Fetched: 2 in 0.026 seconds

PAYMENT_MODE	MAX_PRICE
1 upi	800
2 cash	950