access the data
from rdbms database
and perform business operation
on that data

rdbms
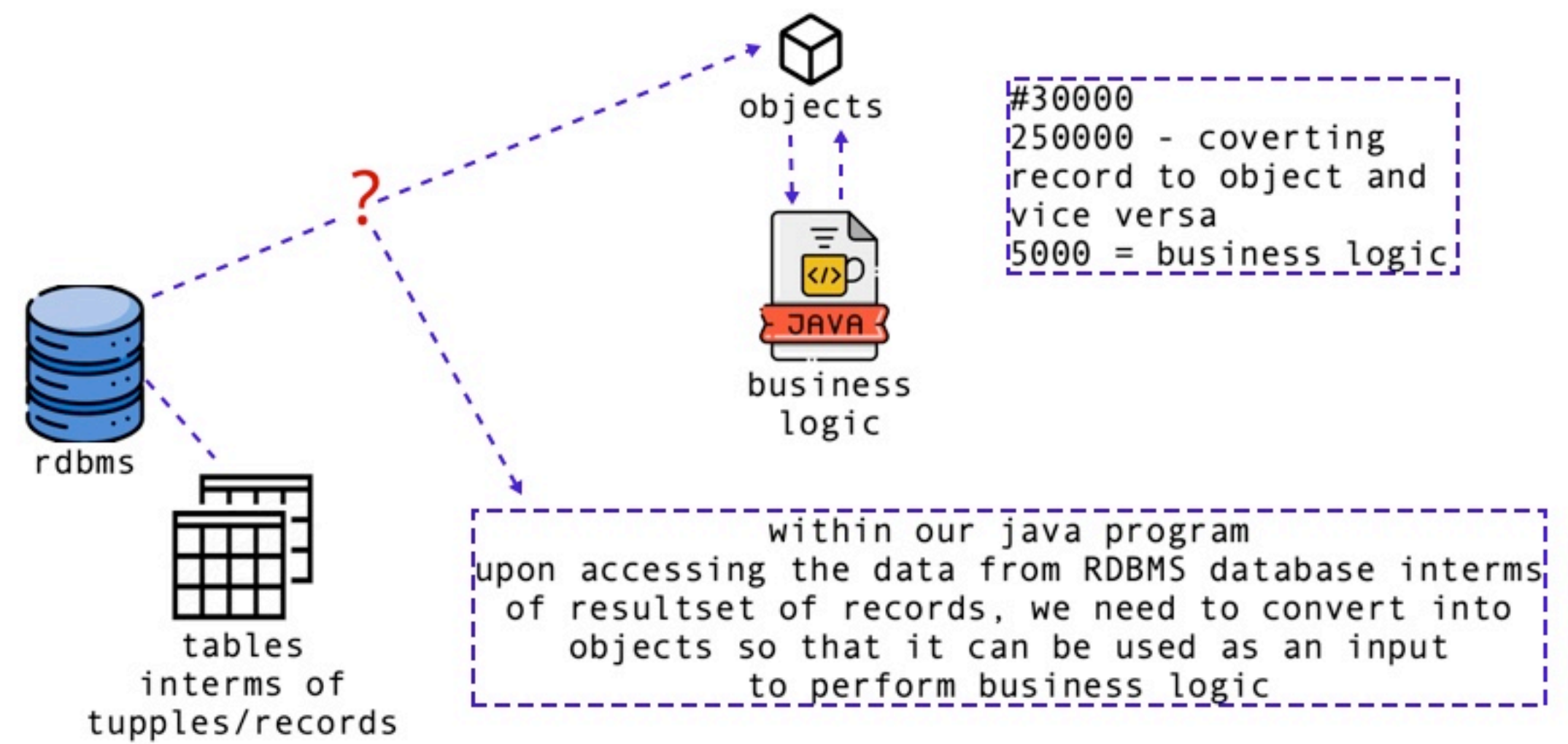
**tables
interms of
tupples/records**

We need to use java jdbc api to access the data from RDBMS.
Always JDBC api allows us to access the data from RDBMS
database interms of ResultSet of records of data only.

Which means JDBC Api let us access the data from RDBMS
database in relational format only.
but we want java programs to access the data interms of
objects, we dont want to access the data in underlying source
system format.

so inorder to
access the data interms
of objects
->

?

objects

#30000
250000 - coverting
record to object and
vice versa
5000 = business logic

**business
logic**

rdbms

**tables
interms of
tupples/records**

within our java program
upon accessing the data from RDBMS database interms
of resultset of records, we need to convert into
objects so that it can be used as an input
to perform business logic

[customer]

customer_no (pk)	customer_nm	mobile_nbr	email_address	gender
c1	anderson	9383844	anderson@gmail.com	male
c2	peter	93848494	peter@yahoo.com	male
c3	julie	3938494	joseph@live.com	female

sales

sale_no	sale_dt	quantity	amount	customer_no (fk)
s1	2024-05-22	10	3500	c1
s2	2024-05-22	5	500	c2
s3	2024-05-22	7	1500	c3
s4	2024-05-21	13	800	c1
s5	2024-05-23	9	900	c2
s6	2024-05-19	11	1200	c1

select c.*, s.* from customer c inner join sales s on c.customer_no = s.customer_no
where c.gender like ?

c1	anderson	9383844	anderson@gmail.com	male	s1
c1	anderson	9383844	anderson@gmail.com	male	s4
c1	anderson	9383844	anderson@gmail.com	male	s6
c2	peter	93848494	peter@yahoo.com	male	s2
c2	peter	93848494	peter@yahoo.com	male	s5

```
class CustomerSale {
  int cid;
  String customerName;
  String mobile;
  String emailAddress;
  String gender;
  int sno;
  Date saleDate;
  int quantity;
  double amount
}
```

```
class Sale {
  int sno;
  Date saleDate;
  int quantity;
  double amount;
  // accessors
}

class CustomerSale {
  int cno;
  String customerName;
  String mobileno;
  String emailAddress;
  String gender;
  List<Sale> sales;
  // accessors
}
```