**SQL JOIN QueriesV1**

## **Inner JOIN**

1. Customers and internet packages (Customers & Packages tables) –
   1. Write a query to display first name, last name, package number and internet speed for all customers.

select c.first\_name, c.last\_name, c.pack\_id, p.speed from customers c inner join packages p on c.pack\_id= p.pack\_id;

* 1. Write a query to display first name, last name, package number and internet speed for all customers whose package number equals 22 or 27. Order the query in ascending order by last name.

select c.first\_name, c.last\_name, c.pack\_id, p.speed from customers c inner join packages p on c.pack\_id= p.pack\_id

where c.pack\_id in (22,27)

order by c.last\_name;

1. Internet packages and sectors –
   1. Display the package number, internet speed, monthly payment and sector name for all packages (Packages and Sectors tables).

select p.pack\_id, p.speed, p.monthly\_payment,s.sector\_name from packages p , sectors s where p.sector\_id = s.sector\_id;

* 1. Display the customer name, package number, internet speed, monthly payment and sector name for all customers (Customers, Packages and Sectors tables).

select c.first\_name ||' '|| c.last\_name as customer\_name, p.pack\_id, p.speed, p.monthly\_payment, s.sector\_name

from customers c inner join packages p on c.pack\_id= p.pack\_id inner join sectors s on p.sector\_id = s.sector\_id;

* 1. Display the customer name, package number, internet speed, monthly payment and sector name for all customers in the business sector (Customers, Packages and Sectors tables).

select c.first\_name ||' '|| c.last\_name as customer\_name, p.pack\_id, p.speed, p.monthly\_payment, s.sector\_name

from customers c inner join packages p on c.pack\_id= p.pack\_id inner join sectors s on p.sector\_id = s.sector\_id

where sector\_name ='Business';

1. Display the last name, first name, join date, package number, internet speed and sector name for all customers in the private sector who joined the company in the year 2006.

select c.last\_name, c.first\_name, c.join\_date, p.pack\_id, p.speed, s.sector\_name from customers c , packages p ,sectors s

where c.pack\_id= p.pack\_id and p.sector\_id = s.sector\_id and sector\_name ='Private' and extract(year from join\_date)='2006';

## **Non Equi Join**

1. Display the package number, internet speed, monthly payment and package grade for all packages (Packages and Pack\_Grades tables).

select p.pack\_id, p.speed, p.monthly\_payment ,pa.grade\_id from packages p , pack\_grades pa ;

## **Outer Join**

* 1. Customers and internet packages (Customers and Packages tables)
     1. Display the first name, last name, internet speed and monthly payment for all customers. Use INNER JOIN to solve this exercise.

select c.first\_name,c.last\_name, p.speed, p.monthly\_payment from customers c , packages p where c.pack\_id = p.pack\_id;

* + 1. Modify last query to display all customers, including those without any internet package.

select c.first\_name,c.last\_name,c.pack\_id, p.speed, p.monthly\_payment from customers c left outer join packages p

on c.pack\_id= p.pack\_id;

* + 1. Modify last query to display all packages, including those without any customers.

select c.first\_name,c.last\_name,c.pack\_id, p.speed, p.monthly\_payment from customers c right outer join packages p

on c.pack\_id= p.pack\_id;

* + 1. Modify last query to display all packages and all customers.

select c.first\_name, c.last\_name, p.pack\_id, p.speed, p.monthly\_payment from customers c full outer join packages p

on c.pack\_id = p.pack\_id;

## **Self-Join**

* + 1. Display the last name, first name and package number for all customers who have the same package number as customer named ‘Amado Taylor’ (Customers table).

select c.first\_name, c.last\_name, c.pack\_id from customers c ,customers cu where cu.first\_name ='Amado'and cu.last\_name='Taylor' and c.pack\_id = cu.pack\_id;

* + 1. Display the last name, first name and monthly discount for all customers whose monthly discount is lower than the monthly discount of employee number 103 (Customers table).

select c.first\_name, c.last\_name, c.monthly\_discount from customers c ,customers cu where cu.customer\_id = 103 and

c.monthly\_discount < cu.monthly\_discount and c.pack\_id = cu.pack\_id ;

* + 1. Display the package number and internet speed for all packages whose internet speed is equal to the internet speed of package number 10 (Packages table).

select p1.pack\_id , p1.speed from packages p1 , packages p2 where p2.pack\_id =10 and p2.speed= p1.speed ;