**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 a.first\_name,a.last\_name,a.pack\_id,b.speed from customers A inner join packages B on a.pack\_id=b.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 a.first\_name,a.last\_name,a.pack\_id,b.speed from customers A inner join packages B on a.pack\_id=b.pack\_id and b.pack\_id in (22,27) order by a.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**

**a.pack\_id,a.speed,a.monthly\_payment,b.sector\_name**

**FROM packages A**

**inner join**

**sectors B**

**on a.sector\_id=b.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**

**a.first\_name||' '|| a.last\_name "Customer Name",b.pack\_id,b.speed,b.monthly\_payment,c.sector\_name**

**FROM customers A**

**inner join**

**packages B on a.pack\_id=b.pack\_id**

**inner join**

**sectors C**

**on b.sector\_id=c.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**

**a.first\_name||' '|| a.last\_name "Customer Name",b.pack\_id,b.speed,b.monthly\_payment,c.sector\_name**

**FROM customers A**

**inner join**

**packages B on a.pack\_id=b.pack\_id**

**inner join**

**sectors C**

**on b.sector\_id=c.sector\_id**

**and c.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**

**a.first\_name,a.last\_name,b.pack\_id,b.speed,c.sector\_name**

**FROM customers A**

**inner join**

**packages B on a.pack\_id=b.pack\_id**

**inner join**

**sectors C**

**on b.sector\_id=c.sector\_id**

**and c.sector\_name='Private' and EXTRACT(year from a.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**

**a.pack\_id,a.speed,a.monthly\_payment,b.grade\_name**

**FROM packages A**

**inner join**

**pack\_grades B**

**on a.monthly\_payment BETWEEN B.min\_price and b.max\_price;**

## **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 a.first\_name,a.last\_name,b.speed,b.monthly\_payment from customers A inner join packages B on a.pack\_id=b.pack\_id;**

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

**select a.first\_name,a.last\_name,b.speed,b.monthly\_payment from customers A left outer join packages B on a.pack\_id=b.pack\_id;**

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

**select a.first\_name,a.last\_name,b.speed,b.monthly\_payment from customers A right outer join packages B on a.pack\_id=b.pack\_id;**

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

**select a.first\_name,a.last\_name,b.speed,b.monthly\_payment from customers A full outer join packages B on a.pack\_id=b.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**

**a.first\_name,a.last\_name,a.pack\_id**

**FROM customers A**

**INNER JOIN**

**(select pack\_id from customers where first\_name||' '||last\_name='Amado Taylor') B**

**on a.pack\_id=b.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**

**a.first\_name,a.last\_name,a.monthly\_discount**

**FROM customers A**

**INNER JOIN**

**(select monthly\_discount from customers where customer\_id=103) B**

**on a.monthly\_discount=b.monthly\_discount;**

* + 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**

**a.pack\_id,a.speed**

**FROM packages A**

**inner join**

**(select speed from packages where pack\_id=10) B**

**on a.speed = b.speed;**