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.
   2. 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.

Ans.A . Select c.first\_name,c.last\_name,c.pack\_id,p.speed

From customers c,packages p

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

B. Select c.first\_name,c.last\_name,c.pack\_id,p.speed

From customers c,packages p

Where c.pack\_id=p.pack\_id

and

c.pack\_id=22

or c.pack\_id=27

order by pack\_id asc;

1. Internet packages and sectors –
   1. Display the package number, internet speed, monthly payment and sector name for all packages (Packages and Sectors tables).
   2. Display the customer name, package number, internet speed, monthly payment and sector name for all customers (Customers, Packages and Sectors tables).
   3. 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).

Ans. A. select p.pack\_id,p.speed,p.monthly\_payment,s.sector\_name

From packages p, sectors s

Where p.sector\_id=s.sector\_id;

B select c.first\_name||’ ‘||c.last\_name, p.pack\_id, p.speed, p.monthly\_payment, s.sector\_name

From customers c, packages p, sectors s

where c.pack\_id=p.pack\_id

and

p.sector\_id=s.sector\_id;

C. select c.customer\_id, p.pack\_id,p.speed,p.monthly\_payment,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 s.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.

Ans. select last\_name,c.first\_name,c.join\_date,c.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 extract(year from join\_date)=2006;

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

Ans. Select p.pack\_id,p.speed,p.monthly\_payment,g.grade\_id

From package p, pack\_grades g;

* 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.
     2. Modify last query to display all customers, including those without any internet package.
     3. Modify last query to display all packages, including those without any customers.
     4. Modify last query to display all packages and all customers.

Ans. A. Select first\_name,last\_name,speed,monthly\_payment

From customers inner join packages

On packages.pack\_id=customers.pack\_id;

b. Select first\_name,last\_name,speed,monthly\_payment,customers.pack\_id

From customers, packages

where packages.pack\_id=customers.pack\_id(+);

c. Select first\_name,last\_name,speed,monthly\_payment,customers.pack\_id

From customers, packages

where packages.pack\_id(+)=customers.pack\_id;

D. Select first\_name,last\_name,speed,monthly\_payment

From customers inner join packages

on packages.pack\_id=customers.pack\_id;

* + 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).

Ans. select c1.last\_name,c1.first\_name,c1.pack\_id

From customers c1,customers c2

where c2.first\_name='Amado'

and c2.last\_name='Taylor'

and c1.pack\_id=c2.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).

ans. select c1.last\_name,c1.first\_name,c1.monthly\_discount

From customers c1,customers c2

Where c1.monthly\_discount<c2.monthly\_discount

And c2.customer\_id=103;

* + 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).

Ans.

select p1.pack\_id,p1.speed

From packages p1,packages p2

Where p1.speed=p2.speed

And p2.pack\_id=10;