**TRAINEE NAME – AAYUSH KHANNA**

**TRAINEE TECHNOLOGY – SQL**

**JOINING DATE – 30 JUNE 2021**

**Write separate queries using a join, a subquery, a CTE, and then an EXISTS to list all AdventureWorks customers who have not placed an order.**

**Using Joins**

SELECT \*

FROM Sales.Customer SC

LEFT OUTER JOIN Sales.SalesOrderHeader SSOH

ON

SC.CustomerID = SSOH.CustomerID

WHERE SSOH.SalesOrderID IS NULL;

Using a Subquery

SELECT \*

FROM Sales.Customer SC , Sales.SalesOrderHeader SSOH

WHERE SC.CustomerID

IN(

SELECT SSOH.CustomerID

FROM Sales.SalesOrderHeader SSOH

WHERE SSOH.SalesOrderID IS NULL

);

**Using a EXISTS**

SELECT \*

FROM Sales.Customer SC

where EXISTS(

SELECT \*

FROM Sales.SalesOrderHeader SSOH

WHERE SSOH.SalesOrderID IS NULL

AND SC.customerID = SSOH.customerID);

**Using CTE**

WITH NotPlacedOrders (BusinessEntityID) AS

( SELECT DISTINCT SC.PersonID

FROM Sales.Customer SC

JOIN Sales.SalesOrderHeader SSOH

ON SC.CustomerID = SSOH.CustomerID )

SELECT DISTINCT PP.BusinessEntityID, PP.LastName, PP.MiddleName, PP.FirstName

FROM Person.Person PP

LEFT JOIN NotPlacedOrders NPO

ON NPO.BusinessEntityID = PP.BusinessEntityID

WHERE NPO.BusinessEntityID IS NULL;