

[Assessment-3]

Que-1) Write SQL query to solve the problem given below

- **Consider a scenario in which you have to create a table called Nobel_win where you have given the information about the entity who has achieved nobel prize in a particular subject all over the world.**
- **Over here the table Nobel_win will contain attributes like year, subject, winner, country and category**

Create table:

```
CREATE TABLE Nobel_win (  
    year INT,  
    subject VARCHAR(20),  
    winner VARCHAR(40),  
    country VARCHAR(20),  
    category VARCHAR(30)  
);
```

Query-1] Write sql query to find the nobel prize winners of the year 1970. Return year,subject and winner

Ans:

```
SELECT year, subject, winner FROM Nobel_win  
WHERE year = 1970;
```

Output:

	year	subject	winner
►	1970	Physics	Hannes Alfven
	1970	Physics	Louis Neel
	1970	Chemistry	Luis Federico Leloir
	1970	Physiology	Ulf von Euler
	1970	Physiology	Bernard Katz
	1970	Literature	Aleksandr Solzhenitsyn
	1970	Economics	Paul Samuelson
	1970	Physiology	Julius Axelrod

Query-2] Write sql query to find the nobel prize winners in chemistry between the years 1965 and 1975. Begin and end values are includedReturn year, subject, winner and country

Ans:

```
SELECT year, subject, winner, country FROM  
Nobel_win WHERE subject = 'Chemistry' AND  
year BETWEEN 1965 AND 1975;
```

Output:

	year	subject	winner	country
▶	1970	Chemistry	Luis Federico Leloir	France
	1971	Chemistry	Gerhard Herzberg	Germany

Query-3] Write sql query to retrieve the details of the winners whose first name matches with the string 'Louis'. Return year,subject,winner,country

Ans:

```
SELECT year, subject, winner, country FROM  
Nobel_win WHERE winner LIKE 'Louis%';
```

Output:

	year	subject	winner	country
▶	1970	Physics	Louis Neel	France

Query-4] Write sql query to find Nobel prize winners for the subject that does not begin with the letter 'P'. Order the result by year, descending and winner in ascending

Ans:

```
SELECT year, subject, winner, country, category
FROM Nobel_win
WHERE subject NOT LIKE 'P%'
ORDER BY year DESC, winner ASC;
```

Output:

	year	subject	winner	country	category
►	1994	Literature	Kenzaburo Oe	Japan	Linguist
	1994	Economics	Reinhard Selten	Germany	Germany t
	1987	Chemistry	Donald J. Cram	USA	Scientist
	1987	Chemistry	Jean-Marie Lehn	France	Scientist
	1987	Literature	Joseph Brodsky	Russia	Linguist
	1987	Economics	Robert Solow	USA	Economist
	1971	Chemistry	Gerhard Herzberg	Germany	Scientist
	1971	Literature	Pablo Neruda	Chile	Linguist
	1971	Economics	Simon Kuznets	Russia	Economist
	1970	Literature	Aleksandr Solzhenitsyn	Russia	Linguist
	1970	Chemistry	Luis Federico Leloir	France	Scientist
	1970	Economics	Paul Samuelson	USA	Economist

Query-5] Write sql query to find the details of 1970 Nobel prize winners. Order the result by subject, ascending except for 'Chemistry' and 'Economics' which will come at the end of the result set. Return year, subject, winner , country and category.

Ans:

```
SELECT year, subject, winner, country, category
FROM Nobel_win WHERE year = 1970
ORDER BY CASE
```

```
    WHEN subject IN ('Chemistry', 'Economics')
    THEN 1
```

```
    ELSE 0
```

```
    END, subject ASC;
```

Output:

	year	subject	winner	country	category
►	1970	Literature	Aleksandr Solzhenitsyn	Russia	Linguist
	1970	Physics	Hannes Alfven	Sweden	Scientist
	1970	Physics	Louis Neel	France	Scientist
	1970	Physiology	Ulf von Euler	Sweden	Scientist
	1970	Physiology	Bernard Katz	Germany	Scientist
	1970	Physiology	Julius Axelrod	USA	Scientist
	1970	Chemistry	Luis Federico Leloir	France	Scientist
	1970	Economics	Paul Samuelson	USA	Economist