Exercise 4

Question 1

```
SELECT  student_id,
        student_name,
        grade
FROM students AS A
INNER JOIN grade AS B
ON A.student_id = B.student_id
```

Student_id	student_name	grade
2	Bob	B
3	Charlie	C

Question 2

```
SELECT  emp_id,
        emp_name,
        dept_name
FROM employees AS A
LEFT JOIN departments AS B
ON A.emp_id = B.emp_id;
```

emp_id	emp_name	dept_name
1	John	NULL
2	Lisa	HR
3	Mike	NULL

Question 3

```
SELECT  product_id,
        product_name,
        quantity
FROM products AS A
```

```
FULL OUTER JOIN sales AS B
ON A product_id = B product_id;
```

Product_id	Product_name	quantity
1	Laptop	NULL
2	Mouse	50
3	keyboard	NULL
4	NULL	30

Question 5

```
SELECT region_id,
       region_name,
SUM (amount) AS total_sales
FROM region AS A
LEFT JOIN sales AS B
ON A.region_id = B.region_id
GROUP BY A region_id, region_name;
```

Question 6

```
SELECT student_id,
       name,
       day_present,
CASE
WHEN days_present >= 15 THEN 'Excellent'
WHEN days_present BETWEEN 6 AND 14 THEN 'Need improvement'
WHEN days_present <= 5 THEN 'Poor Attendance'
ELSE 'No record'
END AS attendence_status
FROM students AS S
LEFT JOIN attendance AS B
ON A.student_id = B.student_id;
```

student_id	name	days_present	attendance_status
1	Alice	18	Excellent
2	Bob	5	Poor attendance
3	Charlie	NULL	No record

Question 7

```
SELECT project_id,
       name
COUNT(task_id) AS task_count
FROM projects AS A
INNER JOIN task AS B
ON A.project_id = B.project_id
GROUP BY A.Project_id, name;
```

project_id	name	task_count
1	AI Chatbot	2
2	Website	1

Question 9

```
SELECT user_id,
       name,
COUNT(login_date) AS login_count
FROM users AS A
LEFT JOIN logins AS B
ON A.user_id = B.user_id
GROUP BY A.user_id, name
ORDER BY login_count DESC;
```

user_id	name	login_count
2	Gloria	2
3	Steve	1
1	Nelson	0