**TASK 1**

1.1

CREATE VIEW Teacher\_view\_1

AS SELECT teacher\_number, first\_name, surname, birth\_date, gender, salary, campus\_code

FROM Teacher

DROP VIEW Teacher\_view\_1

1.2

SELECT \* FROM Teacher\_view\_1

1.3

SELECT surname, first\_name, teacher\_number, Campus.campus\_name

FROM Teacher\_view\_1

LEFT JOIN Campus ON (Teacher\_view\_1.campus\_code = Campus.campus\_code)

ORDER BY surname, first\_name, teacher\_number

1.4

INSERT INTO Teacher\_view\_1 (teacher\_number, first\_name, surname, birth\_date, gender, salary)

VALUES ('h888', 'John', 'Doe', '1980-05-06', 'M', 120000)

1.5.

SELECT \* FROM Teacher\_view\_1

SELECT \* FROM Teacher

--values of phone and email are null for John Doe in the Teacher Table; Teacher table doesn't have colomns phone and email

1.6

DELETE FROM Teacher\_view\_1 WHERE teacher\_number = 'h888'

**TASK 2**

2.1.

CREATE VIEW Teacher\_view\_2

AS SELECT teacher\_number, first\_name, surname, birth\_date, gender, salary, campus\_code

FROM Teacher

WHERE gender = 'M'

2.2

SELECT \* FROM Teacher\_view\_2

2.3

INSERT INTO Teacher\_view\_2 (teacher\_number, first\_name, surname, birth\_date, gender, salary, campus\_code)

VALUES ('h800', 'Susan', 'Smith', '1980-05-06', 'F', 120000, NULL)

2.4

SELECT \* FROM Teacher\_view\_2

--No, because the view displays male teachers only

2.5.

SELECT \* FROM Teacher

--Yes, we see this teacher.

DELETE FROM Teacher WHERE teacher\_number = 'h800'

2.6

DROP VIEW Teacher\_view\_2

CREATE VIEW Teacher\_view\_2

AS SELECT teacher\_number, first\_name, surname, birth\_date, gender, salary, campus\_code

FROM Teacher

WHERE gender = 'M'

WITH CHECK OPTION

2.7

INSERT INTO Teacher\_view\_2 (teacher\_number, first\_name, surname, birth\_date, gender, salary, campus\_code)

VALUES ('h800', 'Susan', 'Smith', '1980-05-06', 'F', 120000, NULL)

Msg 550, Level 16, State 1, Line 63

The attempted insert or update failed because the target view either specifies WITH CHECK OPTION or spans a view that specifies WITH CHECK OPTION and one or more rows resulting from the operation did not qualify under the CHECK OPTION constraint.

--The statement has been terminated.

**TASK 3**

3.1

CREATE VIEW Teacher\_view\_3

AS SELECT teacher\_number, first\_name, surname, campus\_name

FROM Teacher

LEFT JOIN Campus ON (Teacher.campus\_code = Campus.campus\_code)

DROP VIEW Teacher\_view\_3;

3.2

SELECT \* FROM Teacher

3.3.

SELECT \* FROM Teacher\_view\_3

ORDER BY surname, first\_name, teacher\_number

**TASK 4**

4.1

CREATE VIEW Student\_GPA\_view

AS SELECT Student.student\_number, Student.first\_name, Student.surname, CAST(AVG(CourseGrade.grade \*1.0) AS DECIMAL (4,2)) AS 'Average grade'

FROM Student

JOIN CourseGrade ON (CourseGrade.student\_number = Student.student\_number)

GROUP BY Student.student\_number, Student.first\_name, Student.surname

SELECT \* FROM Student\_GPA\_view

4.2

SELECT \* FROM Student\_GPA\_view

WHERE Student\_number = 'o410'