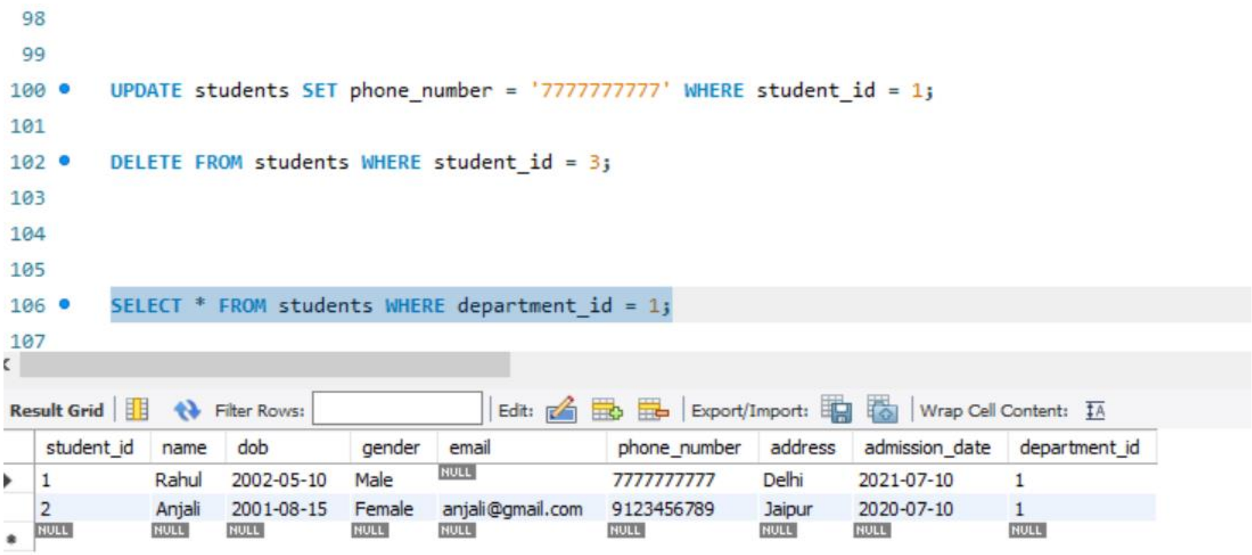
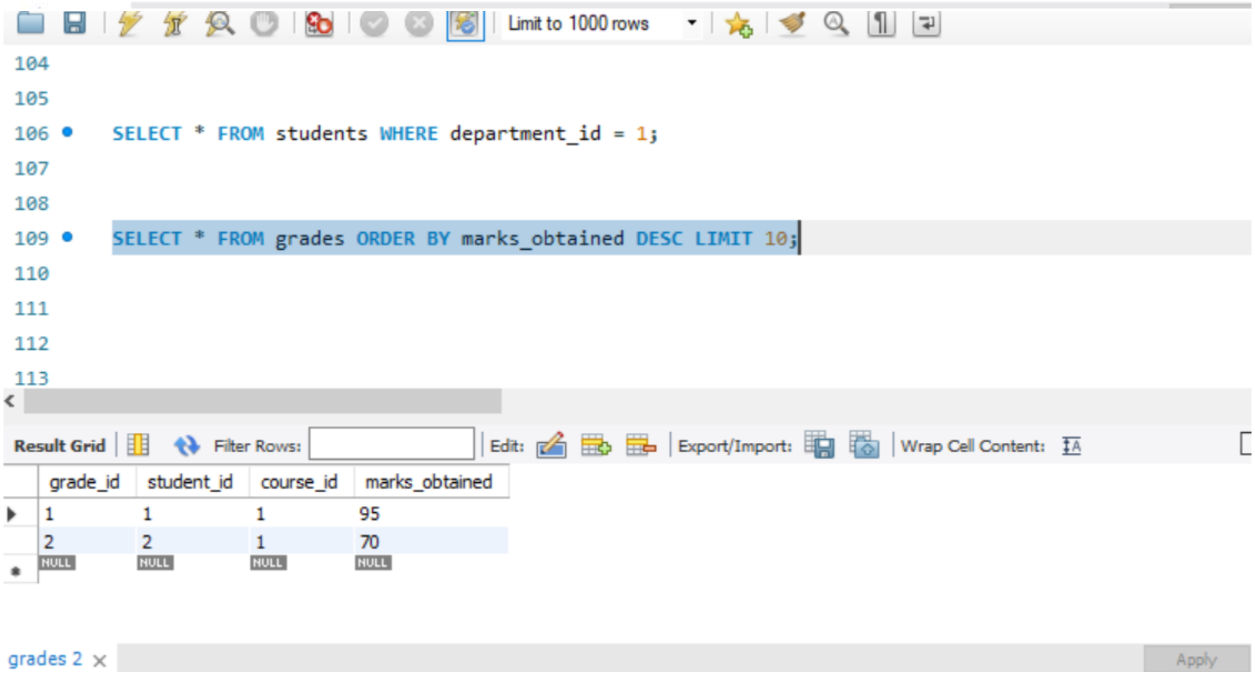


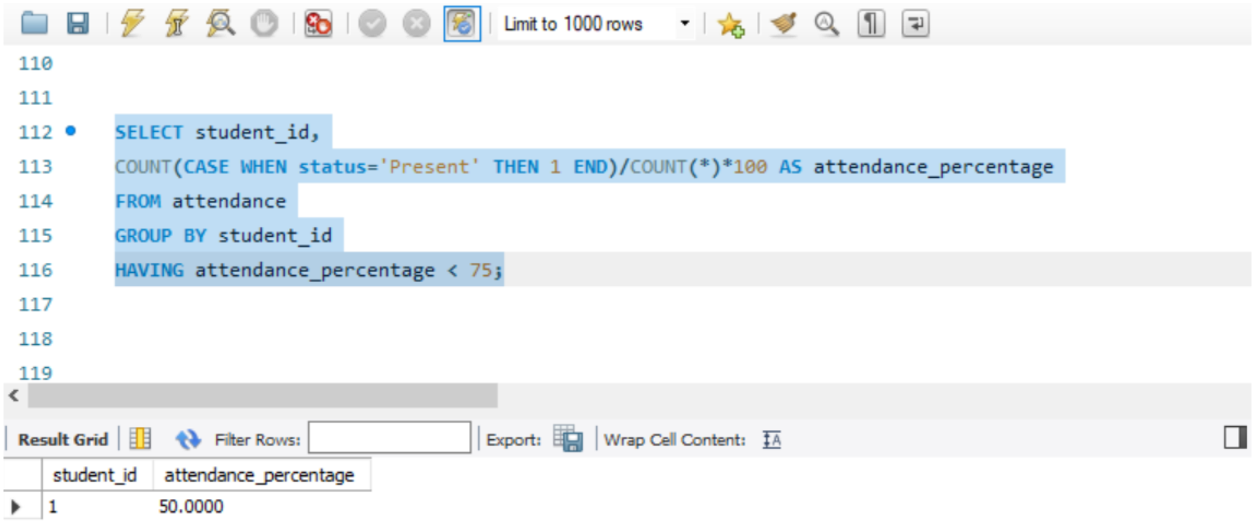
```sql


UPDATE students SET phone_number = '7777777777' WHERE student_id = 1;

DELETE FROM students WHERE student_id = 3;



SELECT * FROM students WHERE department_id = 1;

```

student_id	name	dob	gender	email	phone_number	address	admission_date	department_id
1	Rahul	2002-05-10	Male	NULL	7777777777	Delhi	2021-07-10	1
2	Anjali	2001-08-15	Female	anjali@gmail.com	9123456789	Jaipur	2020-07-10	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL



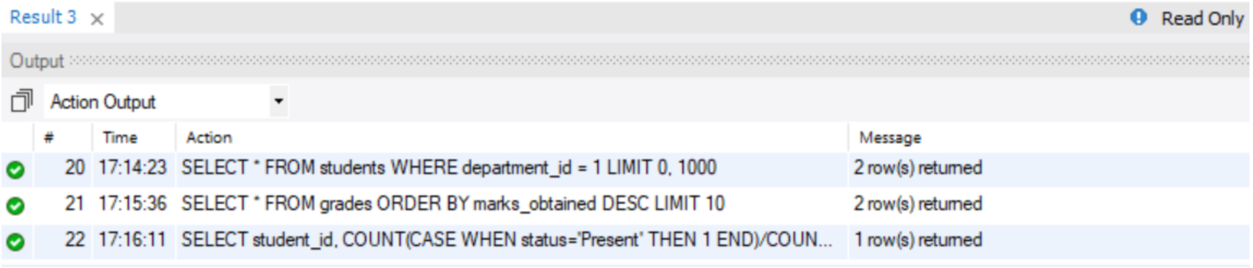
```sql


SELECT * FROM students WHERE department_id = 1;


SELECT * FROM grades ORDER BY marks_obtained DESC LIMIT 10;




```

grade_id	student_id	course_id	marks_obtained
1	1	1	95
2	2	1	70
NULL	NULL	NULL	NULL

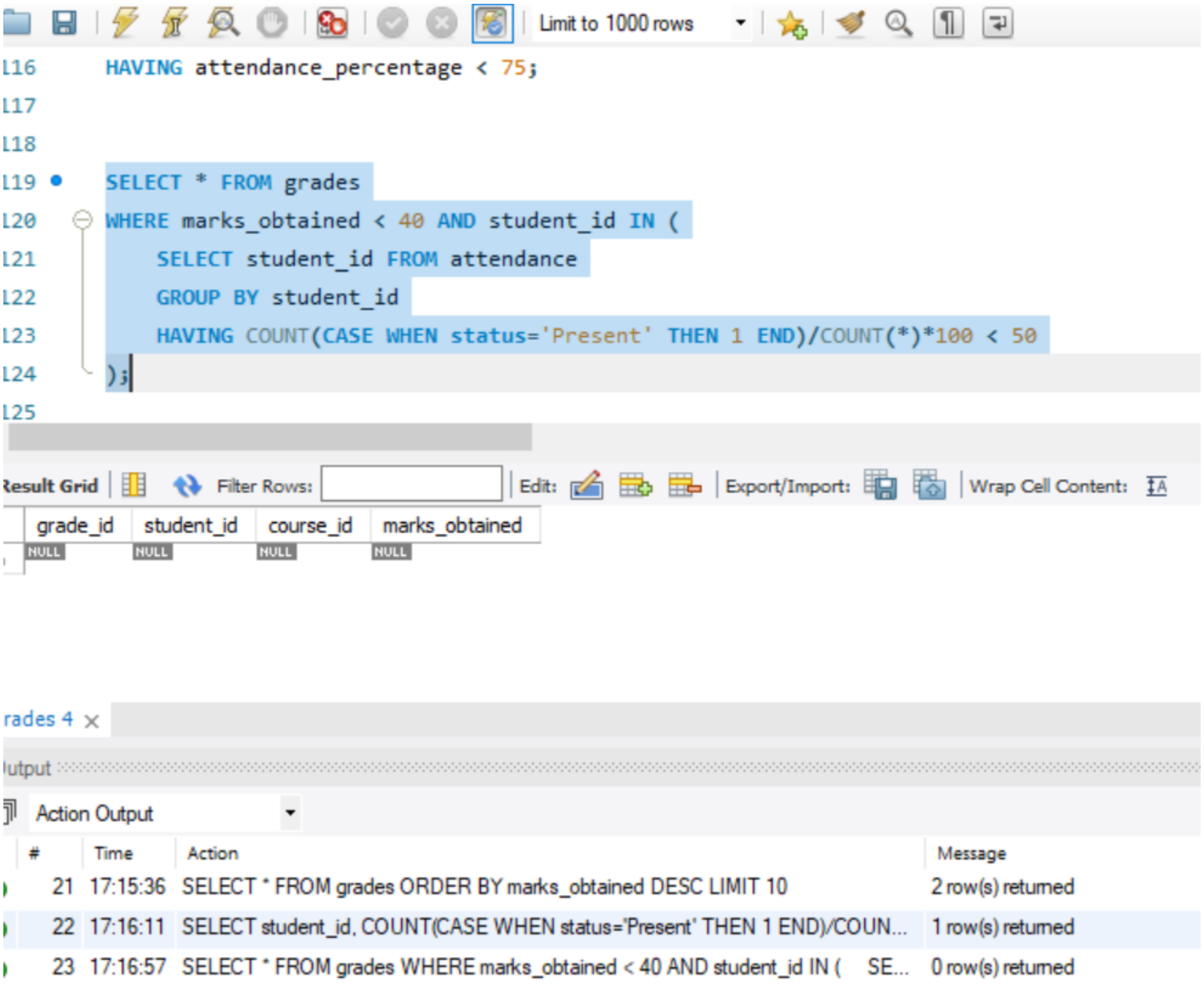


```sql
SELECT student_id,
COUNT(CASE WHEN status='Present' THEN 1 END)/COUNT(*)*100 AS attendance_percentage
FROM attendance
GROUP BY student_id
HAVING attendance_percentage < 75;
```

```
student_id   attendance_percentage
1            50.0000
```



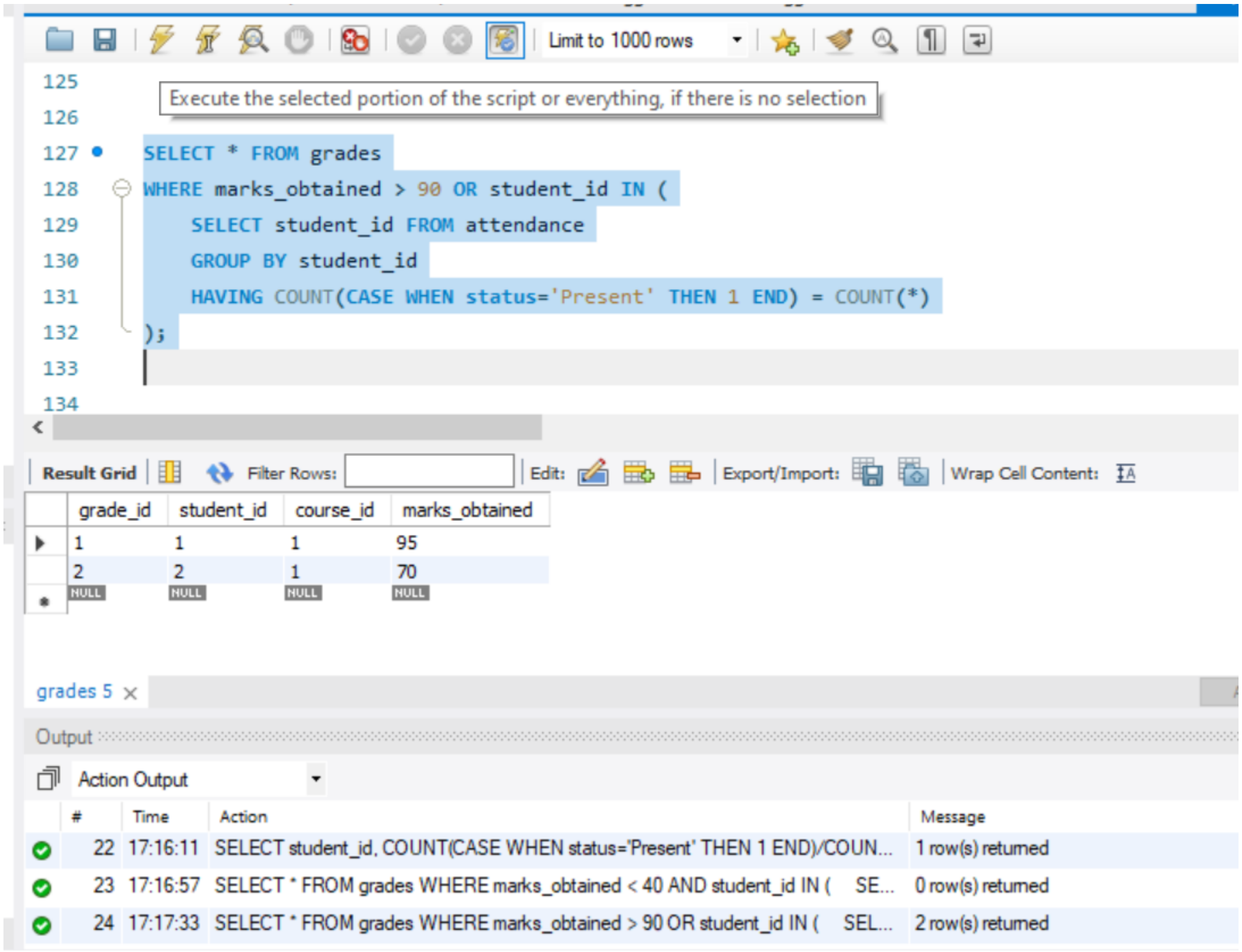
```
#    Time      Action                                                           Message
20   17:14:23  SELECT * FROM students WHERE department_id = 1 LIMIT 0, 1000    2 row(s) returned
21   17:15:36  SELECT * FROM grades ORDER BY marks_obtained DESC LIMIT 10       2 row(s) returned
22   17:16:11  SELECT student_id, COUNT(CASE WHEN status='Present' THEN 1 END)/COUN...   1 row(s) returned
```



```sql
HAVING attendance_percentage < 75;


SELECT * FROM grades
WHERE marks_obtained < 40 AND student_id IN (
    SELECT student_id FROM attendance
    GROUP BY student_id
    HAVING COUNT(CASE WHEN status='Present' THEN 1 END)/COUNT(*)*100 < 50
);
```

grade_id	student_id	course_id	marks_obtained
NULL	NULL	NULL	NULL

#	Time	Action	Message
21	17:15:36	SELECT * FROM grades ORDER BY marks_obtained DESC LIMIT 10	2 row(s) returned
22	17:16:11	SELECT student_id, COUNT(CASE WHEN status='Present' THEN 1 END)/COUN...	1 row(s) returned
23	17:16:57	SELECT * FROM grades WHERE marks_obtained < 40 AND student_id IN (SE...	0 row(s) returned

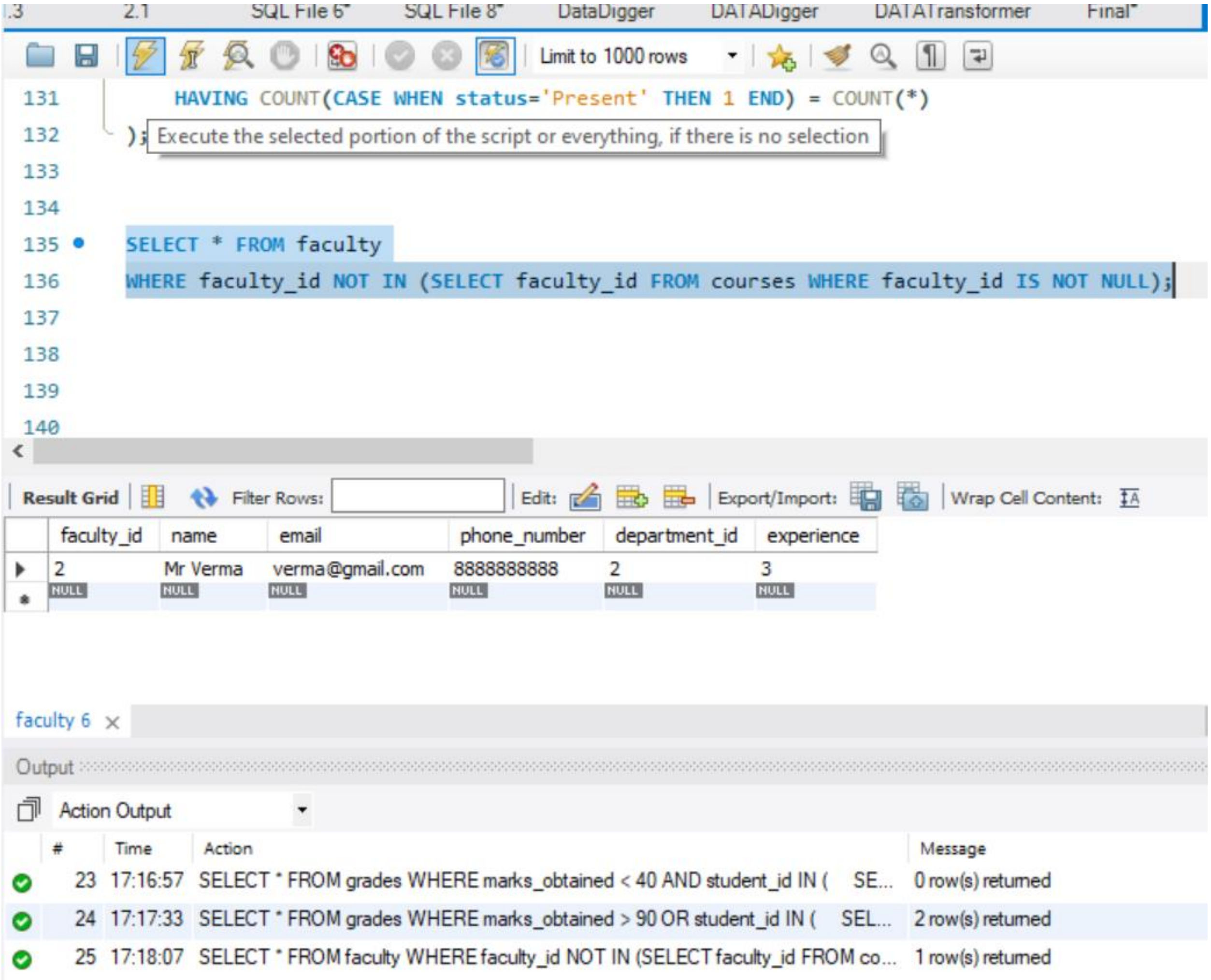


Execute the selected portion of the script or everything, if there is no selection

```
SELECT * FROM grades
WHERE marks_obtained > 90 OR student_id IN (
    SELECT student_id FROM attendance
    GROUP BY student_id
    HAVING COUNT(CASE WHEN status='Present' THEN 1 END) = COUNT(*)
);
```

grade_id	student_id	course_id	marks_obtained
1	1	1	95
2	2	1	70
NULL	NULL	NULL	NULL

#	Time	Action	Message
22	17:16:11	SELECT student_id, COUNT(CASE WHEN status='Present' THEN 1 END)/COUN...	1 row(s) returned
23	17:16:57	SELECT * FROM grades WHERE marks_obtained < 40 AND student_id IN (SE...	0 row(s) returned
24	17:17:33	SELECT * FROM grades WHERE marks_obtained > 90 OR student_id IN (SEL...	2 row(s) returned



Limit to 1000 rows

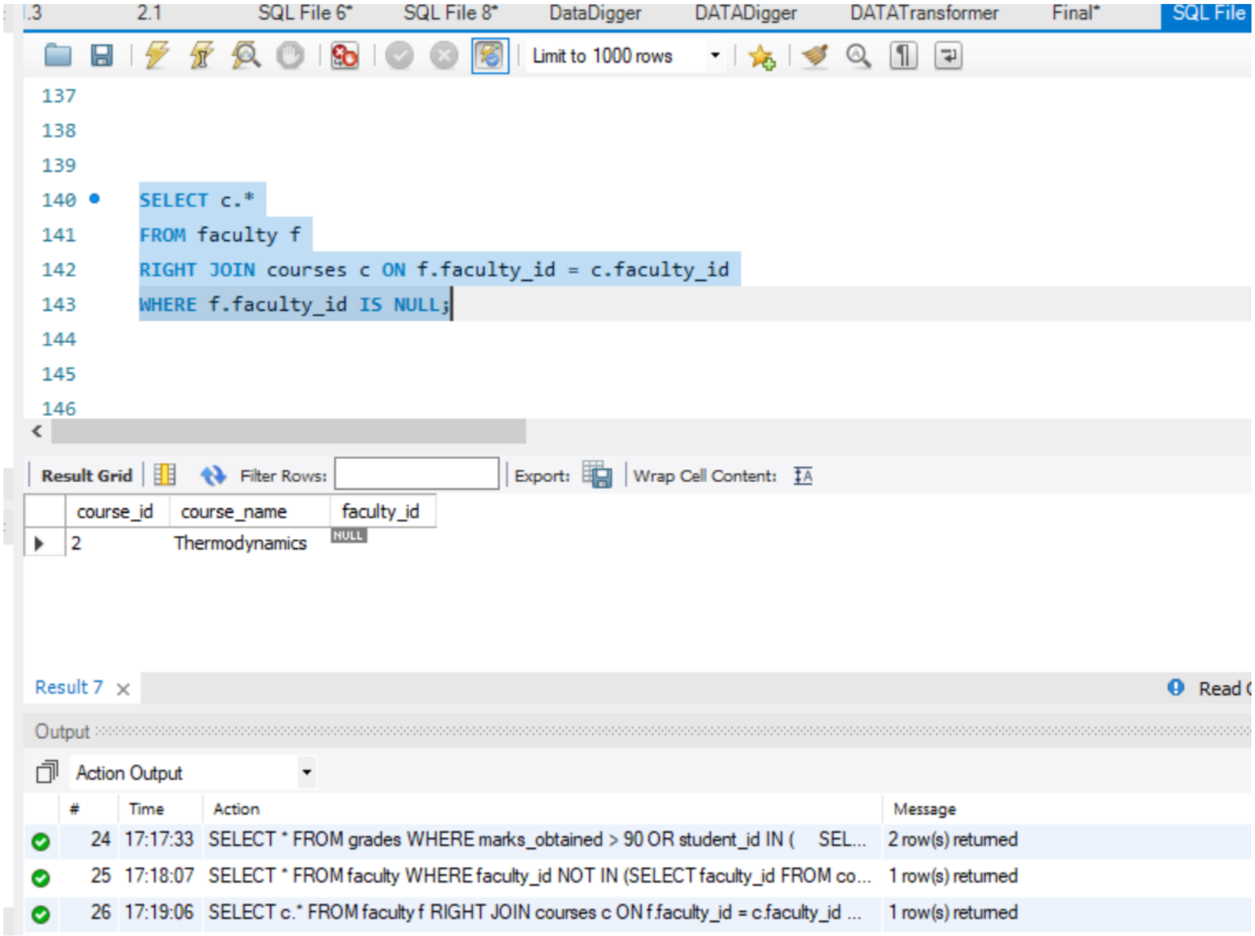
```
    HAVING COUNT(CASE WHEN status='Present' THEN 1 END) = COUNT(*)
);
```

Execute the selected portion of the script or everything, if there is no selection

```
SELECT * FROM faculty
WHERE faculty_id NOT IN (SELECT faculty_id FROM courses WHERE faculty_id IS NOT NULL);
```

faculty_id	name	email	phone_number	department_id	experience
2	Mr Verma	verma@gmail.com	8888888888	2	3
NULL	NULL	NULL	NULL	NULL	NULL

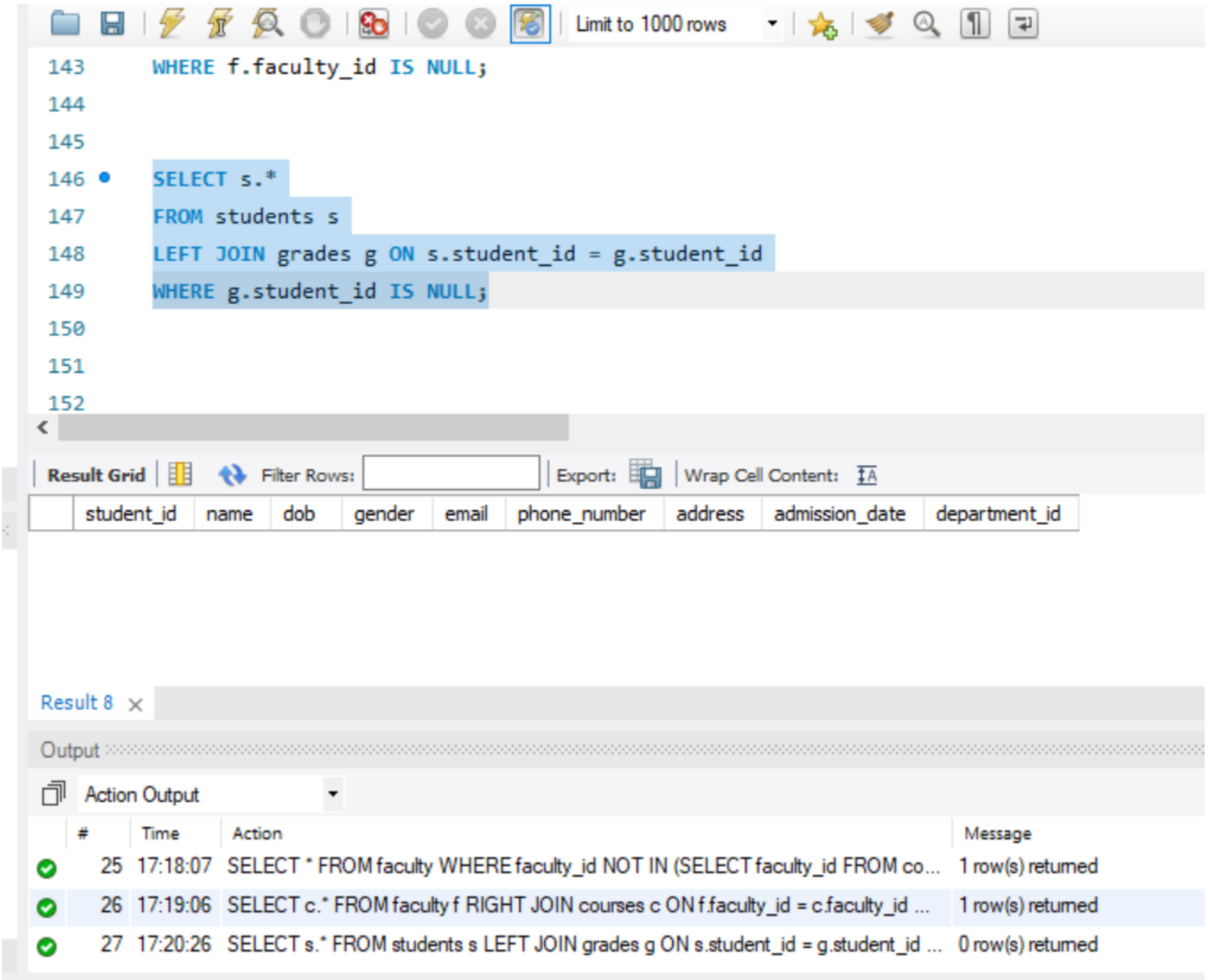
```
#   Time      Action                                                                   Message
23  17:16:57  SELECT * FROM grades WHERE marks_obtained < 40 AND student_id IN (   SE...  0 row(s) returned
24  17:17:33  SELECT * FROM grades WHERE marks_obtained > 90 OR student_id IN (   SEL...  2 row(s) returned
25  17:18:07  SELECT * FROM faculty WHERE faculty_id NOT IN (SELECT faculty_id FROM co...  1 row(s) returned
```



```sql
SELECT c.*
FROM faculty f
RIGHT JOIN courses c ON f.faculty_id = c.faculty_id
WHERE f.faculty_id IS NULL;
```

course_id	course_name	faculty_id
2	Thermodynamics	NULL

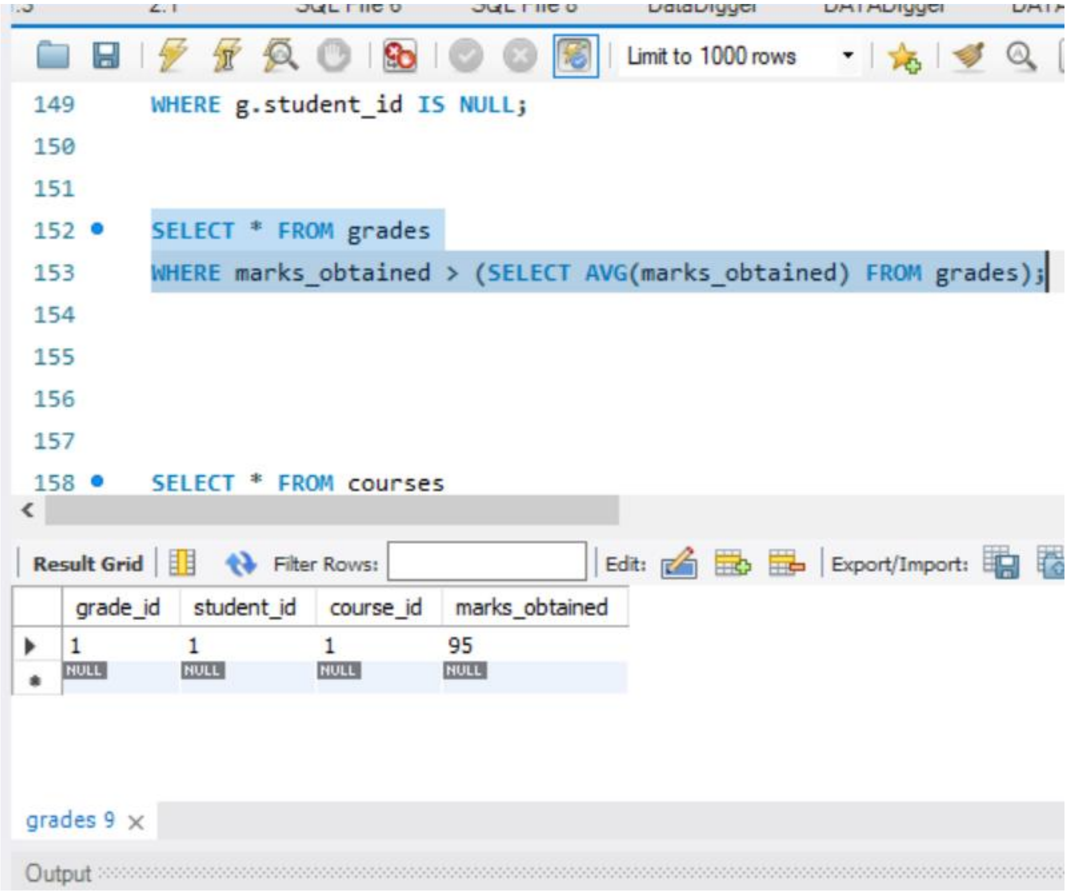
#	Time	Action	Message
24	17:17:33	SELECT * FROM grades WHERE marks_obtained > 90 OR student_id IN (SEL...	2 row(s) returned
25	17:18:07	SELECT * FROM faculty WHERE faculty_id NOT IN (SELECT faculty_id FROM co...	1 row(s) returned
26	17:19:06	SELECT c.* FROM faculty f RIGHT JOIN courses c ON f.faculty_id = c.faculty_id ...	1 row(s) returned



```sql
WHERE f.faculty_id IS NULL;


SELECT s.*
FROM students s
LEFT JOIN grades g ON s.student_id = g.student_id
WHERE g.student_id IS NULL;
```

student_id	name	dob	gender	email	phone_number	address	admission_date	department_id

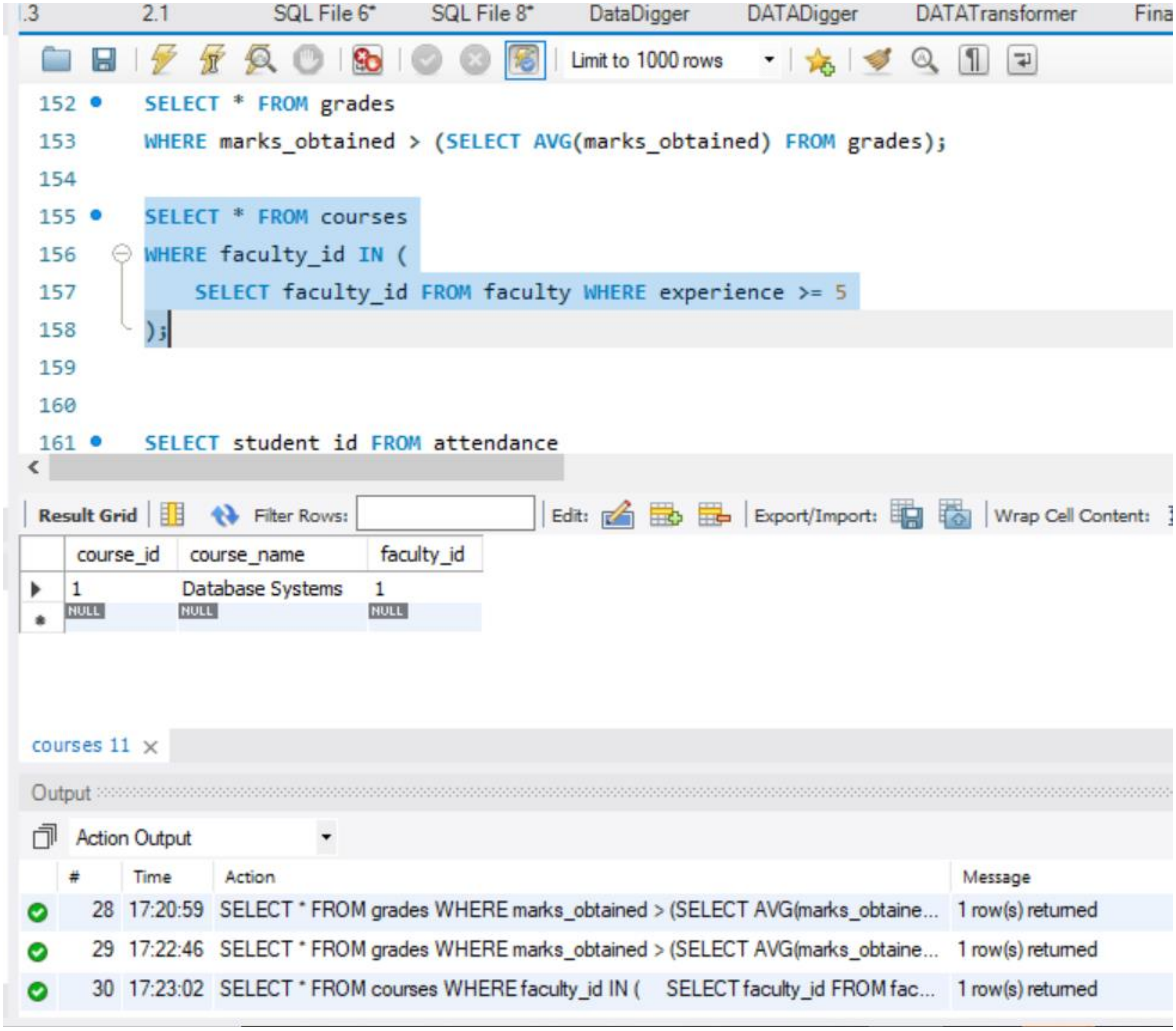
```
#   Time      Action                                                                  Message
25  17:18:07  SELECT * FROM faculty WHERE faculty_id NOT IN (SELECT faculty_id FROM co...  1 row(s) returned
26  17:19:06  SELECT c.* FROM faculty f RIGHT JOIN courses c ON f.faculty_id = c.faculty_id ...  1 row(s) returned
27  17:20:26  SELECT s.* FROM students s LEFT JOIN grades g ON s.student_id = g.student_id ...  0 row(s) returned
```



Limit to 1000 rows

```
WHERE g.student_id IS NULL;


SELECT * FROM grades
WHERE marks_obtained > (SELECT AVG(marks_obtained) FROM grades);




SELECT * FROM courses
```

grade_id	student_id	course_id	marks_obtained
1	1	1	95
NULL	NULL	NULL	NULL

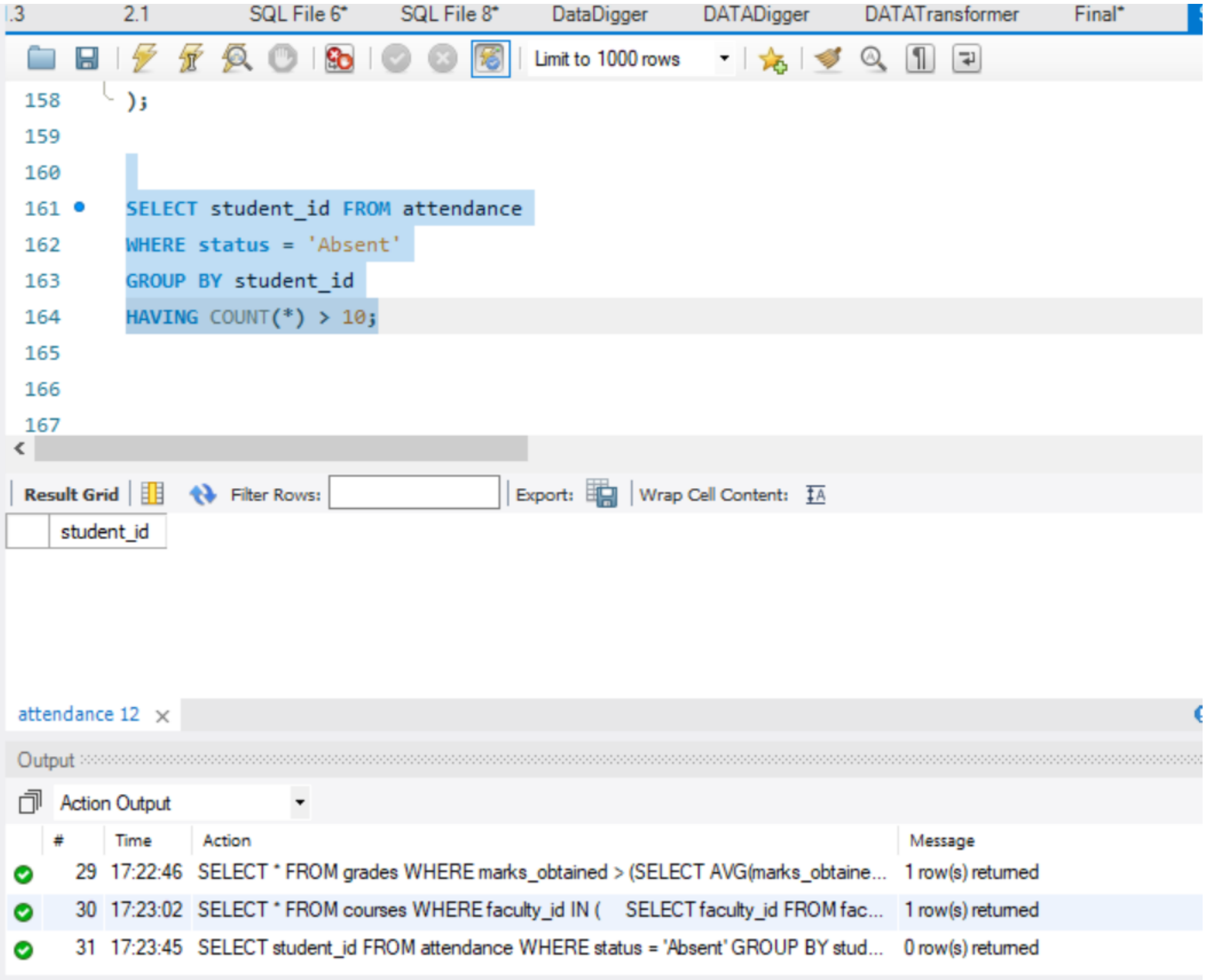


Limit to 1000 rows

```sql
SELECT * FROM grades
WHERE marks_obtained > (SELECT AVG(marks_obtained) FROM grades);

SELECT * FROM courses
WHERE faculty_id IN (
    SELECT faculty_id FROM faculty WHERE experience >= 5
);


SELECT student_id FROM attendance
```

	course_id	course_name	faculty_id
▶	1	Database Systems	1
*	NULL	NULL	NULL

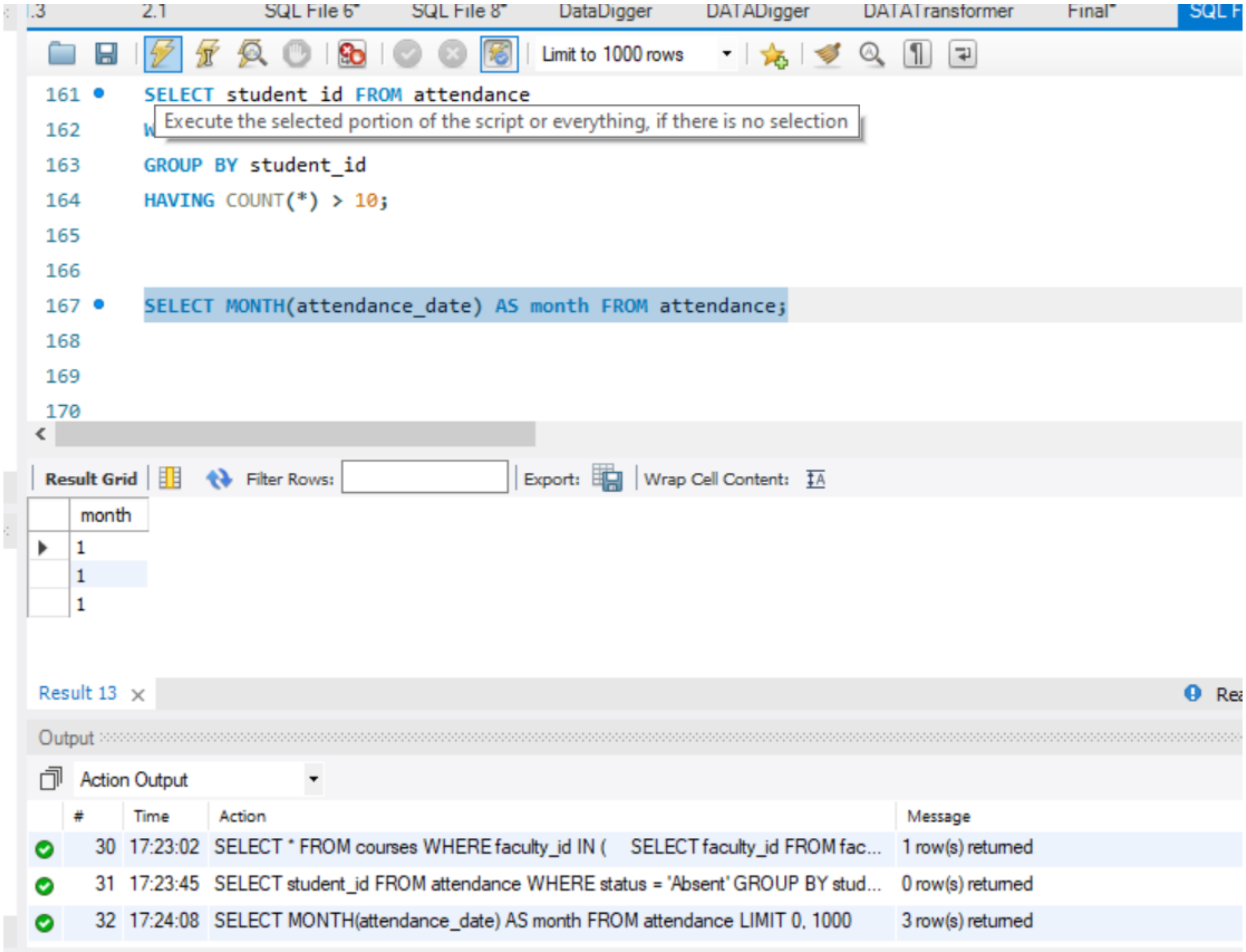
	#	Time	Action	Message
✓	28	17:20:59	SELECT * FROM grades WHERE marks_obtained > (SELECT AVG(marks_obtaine...	1 row(s) returned
✓	29	17:22:46	SELECT * FROM grades WHERE marks_obtained > (SELECT AVG(marks_obtaine...	1 row(s) returned
✓	30	17:23:02	SELECT * FROM courses WHERE faculty_id IN (SELECT faculty_id FROM fac...	1 row(s) returned



```
);


SELECT student_id FROM attendance
WHERE status = 'Absent'
GROUP BY student_id
HAVING COUNT(*) > 10;
```

student_id

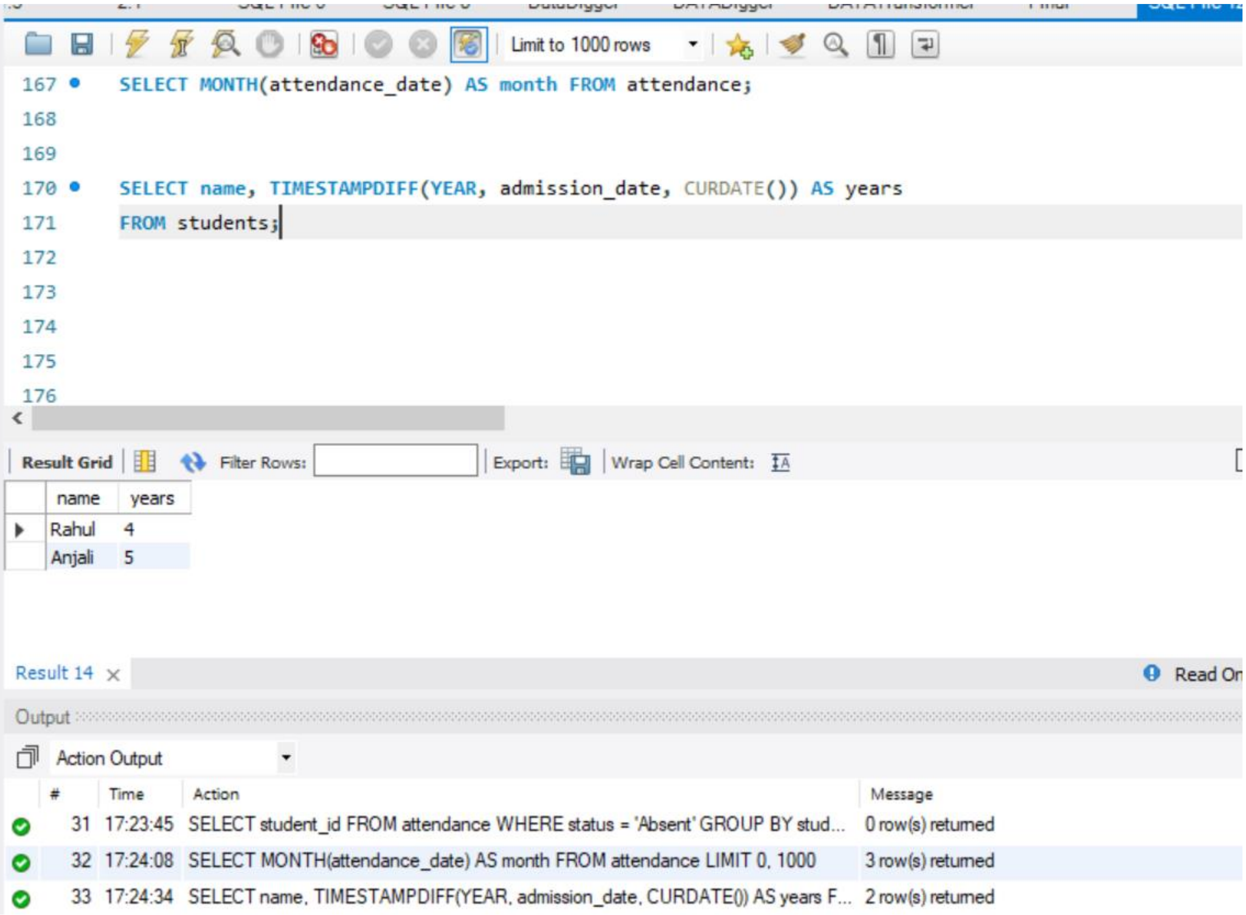
```
#   Time      Action                                                                  Message
29  17:22:46  SELECT * FROM grades WHERE marks_obtained > (SELECT AVG(marks_obtaine...   1 row(s) returned
30  17:23:02  SELECT * FROM courses WHERE faculty_id IN (   SELECT faculty_id FROM fac... 1 row(s) returned
31  17:23:45  SELECT student_id FROM attendance WHERE status = 'Absent' GROUP BY stud...  0 row(s) returned
```



```
SELECT student_id FROM attendance
W
GROUP BY student_id
HAVING COUNT(*) > 10;


SELECT MONTH(attendance_date) AS month FROM attendance;
```

month
1
1
1

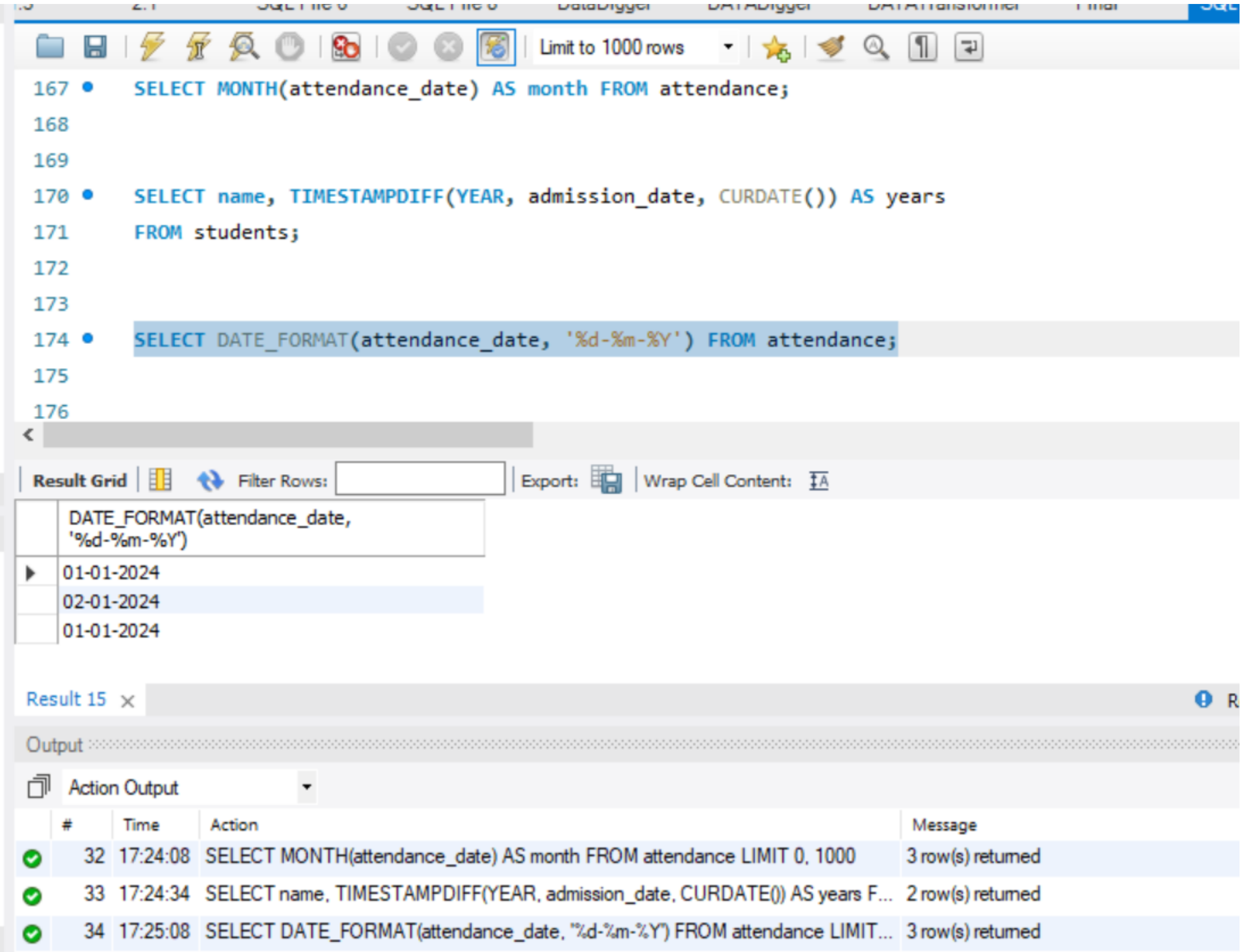
	#	Time	Action	Message
✓	30	17:23:02	SELECT * FROM courses WHERE faculty_id IN (SELECT faculty_id FROM fac...	1 row(s) returned
✓	31	17:23:45	SELECT student_id FROM attendance WHERE status = 'Absent' GROUP BY stud...	0 row(s) returned
✓	32	17:24:08	SELECT MONTH(attendance_date) AS month FROM attendance LIMIT 0, 1000	3 row(s) returned



```sql
SELECT MONTH(attendance_date) AS month FROM attendance;


SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years
FROM students;
```

name	years
Rahul	4
Anjali	5

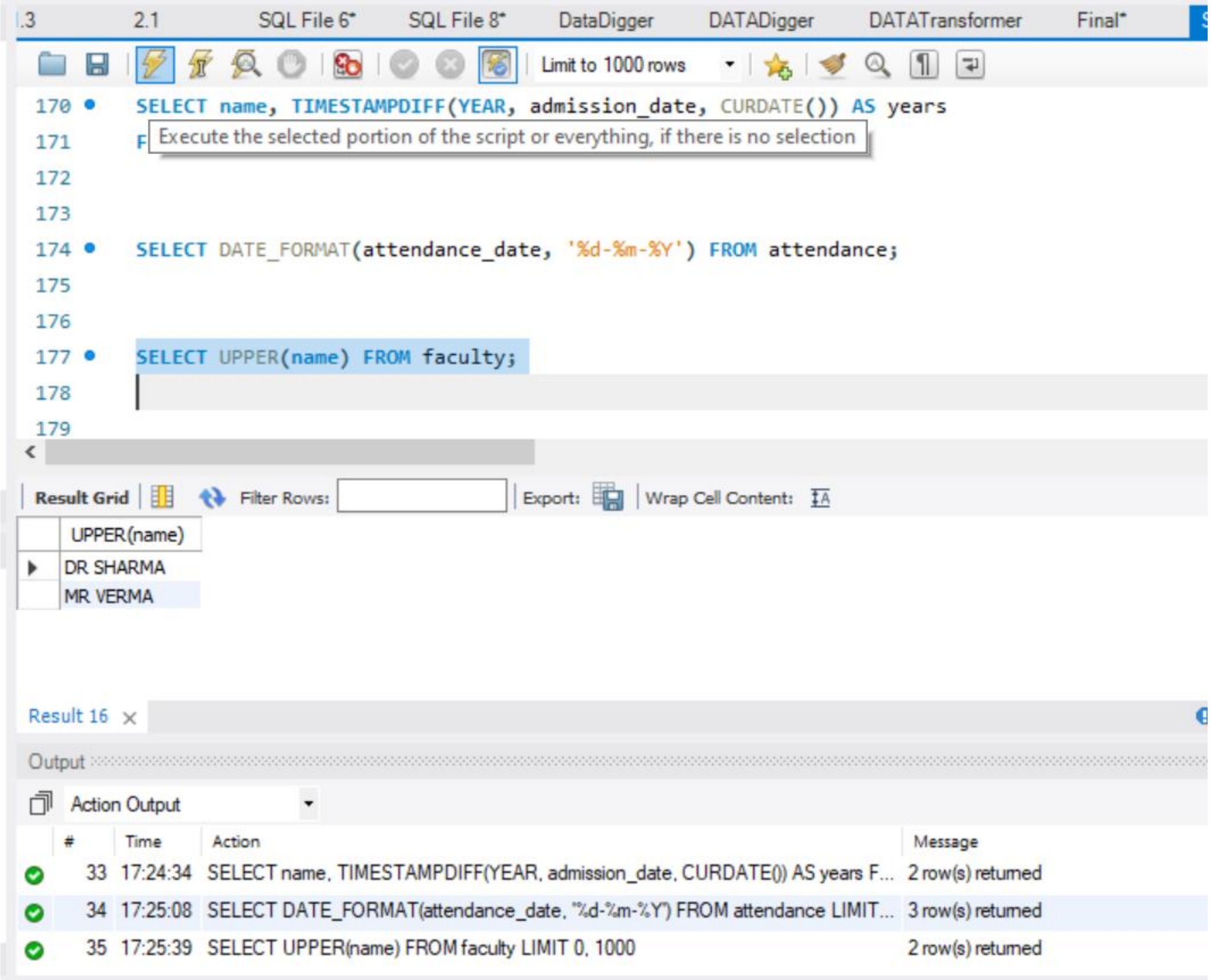
```
#   Time      Action                                                                    Message
31  17:23:45  SELECT student_id FROM attendance WHERE status = 'Absent' GROUP BY stud...  0 row(s) returned
32  17:24:08  SELECT MONTH(attendance_date) AS month FROM attendance LIMIT 0, 1000         3 row(s) returned
33  17:24:34  SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years F...    2 row(s) returned
```



```sql
SELECT MONTH(attendance_date) AS month FROM attendance;


SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years
FROM students;


SELECT DATE_FORMAT(attendance_date, '%d-%m-%Y') FROM attendance;
```

```
DATE_FORMAT(attendance_date,
'%d-%m-%Y')
01-01-2024
02-01-2024
01-01-2024
```

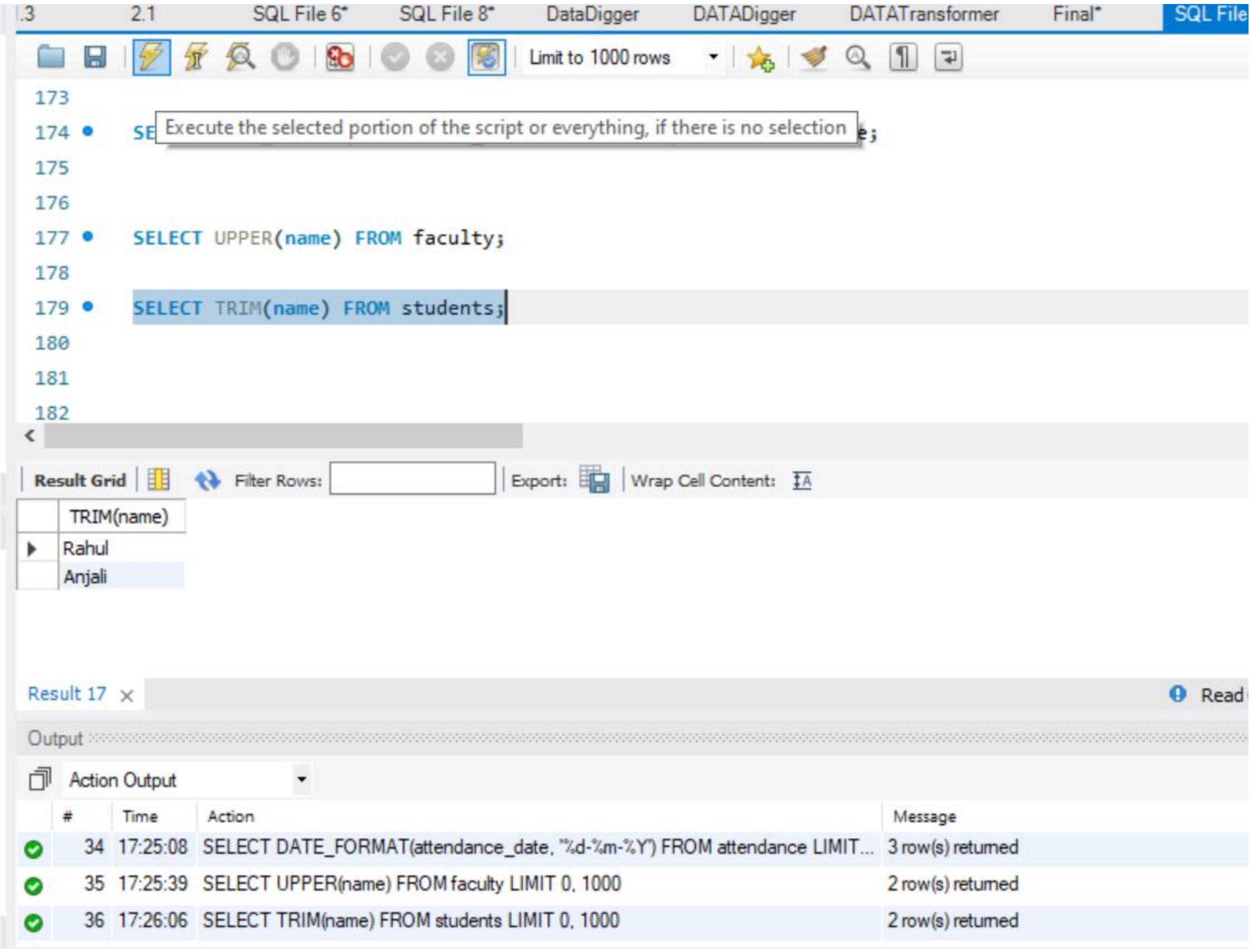
```
#   Time      Action                                                                  Message
32  17:24:08  SELECT MONTH(attendance_date) AS month FROM attendance LIMIT 0, 1000    3 row(s) returned
33  17:24:34  SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years F...  2 row(s) returned
34  17:25:08  SELECT DATE_FORMAT(attendance_date, '%d-%m-%Y') FROM attendance LIMIT...  3 row(s) returned
```



```sql
SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years
F


SELECT DATE_FORMAT(attendance_date, '%d-%m-%Y') FROM attendance;


SELECT UPPER(name) FROM faculty;
```

UPPER(name)
DR SHARMA
MR VERMA

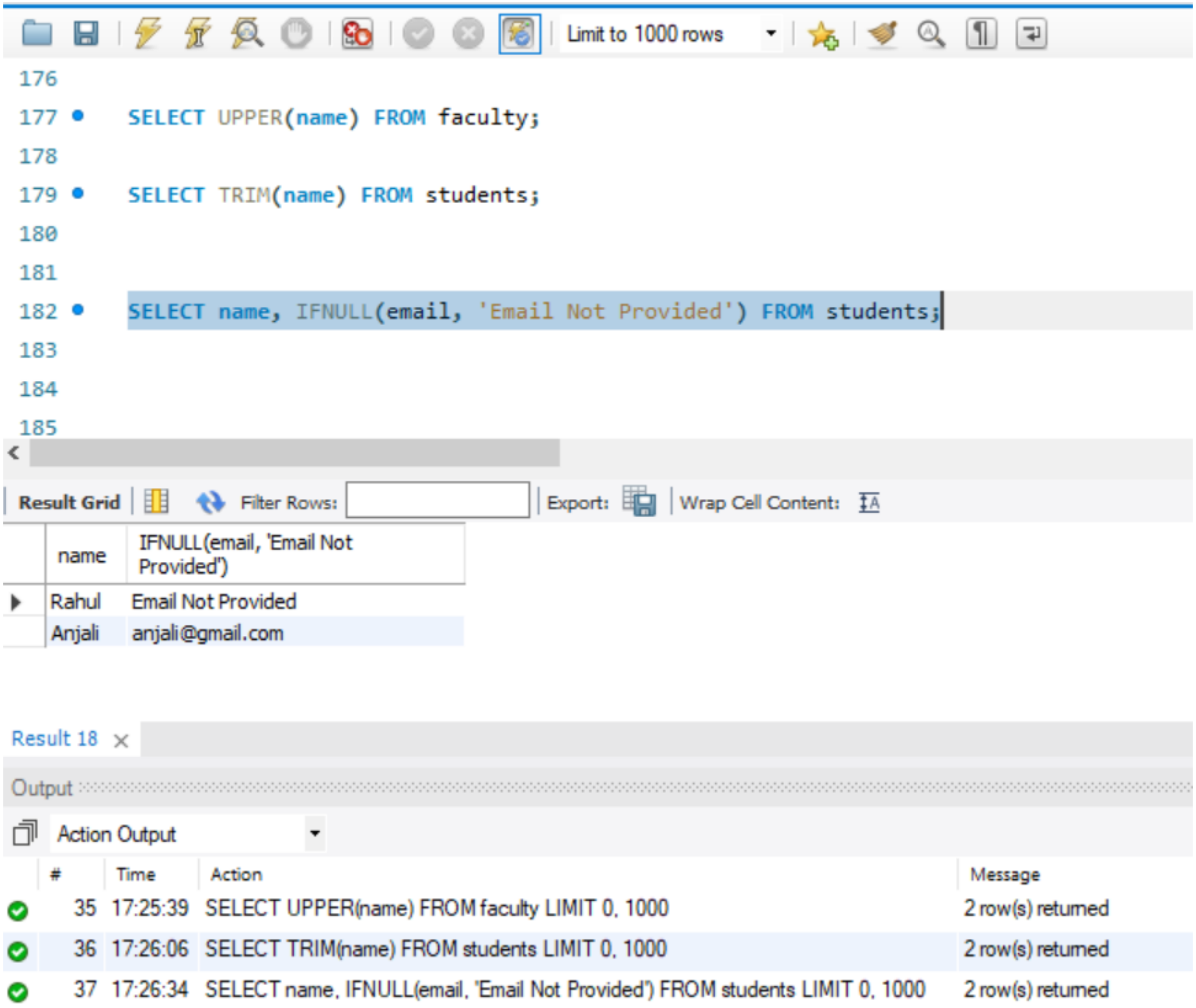
```
#   Time      Action                                                                    Message
33  17:24:34  SELECT name, TIMESTAMPDIFF(YEAR, admission_date, CURDATE()) AS years F...  2 row(s) returned
34  17:25:08  SELECT DATE_FORMAT(attendance_date, '%d-%m-%Y') FROM attendance LIMIT...   3 row(s) returned
35  17:25:39  SELECT UPPER(name) FROM faculty LIMIT 0, 1000                              2 row(s) returned
```



```
SE                                                        e;


SELECT UPPER(name) FROM faculty;

SELECT TRIM(name) FROM students;
```

TRIM(name)
Rahul
Anjali

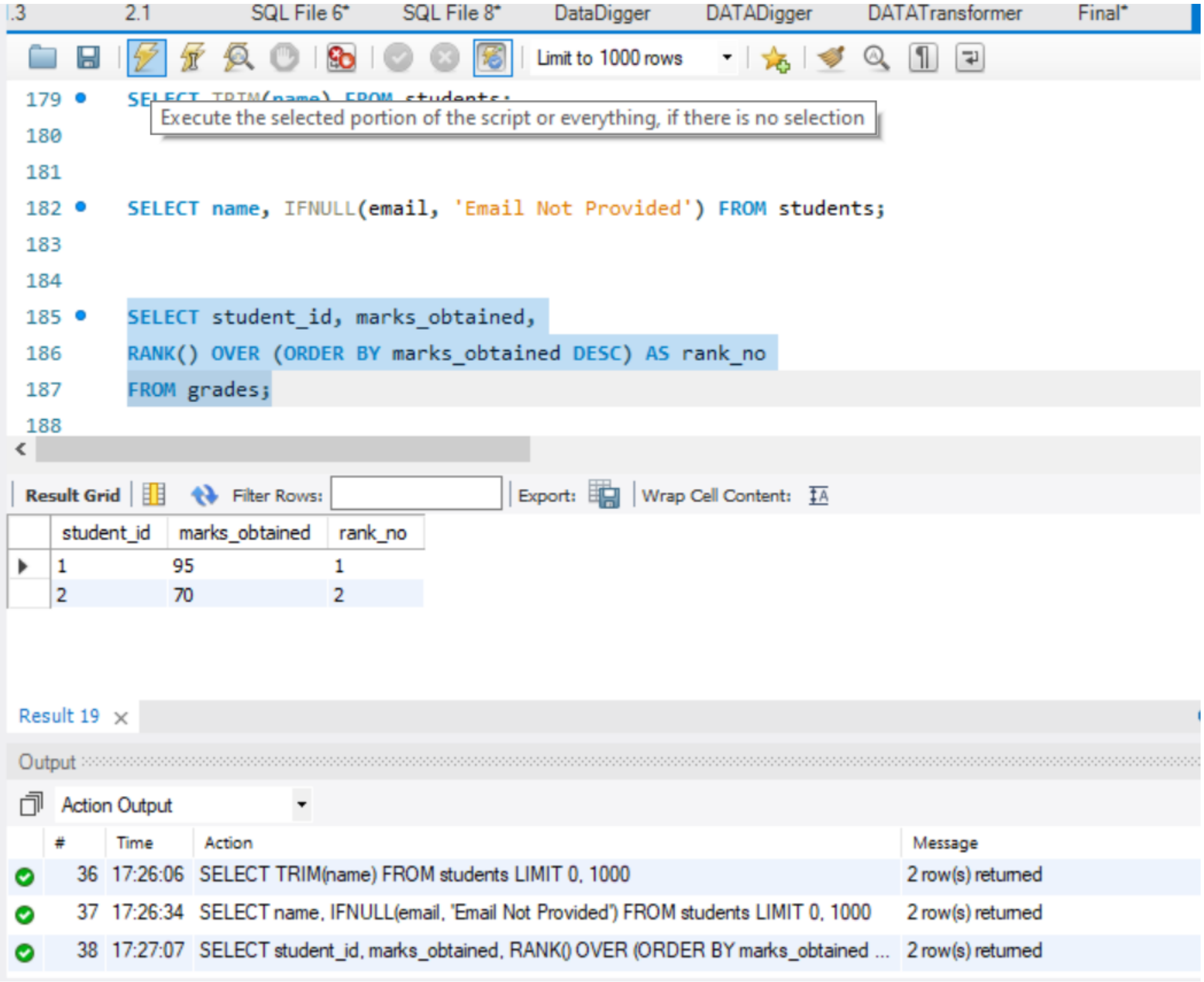
#	Time	Action	Message
34	17:25:08	SELECT DATE_FORMAT(attendance_date, '%d-%m-%Y') FROM attendance LIMIT...	3 row(s) returned
35	17:25:39	SELECT UPPER(name) FROM faculty LIMIT 0, 1000	2 row(s) returned
36	17:26:06	SELECT TRIM(name) FROM students LIMIT 0, 1000	2 row(s) returned



```sql

SELECT UPPER(name) FROM faculty;

SELECT TRIM(name) FROM students;


SELECT name, IFNULL(email, 'Email Not Provided') FROM students;



```

name	IFNULL(email, 'Email Not Provided')
Rahul	Email Not Provided
Anjali	anjali@gmail.com

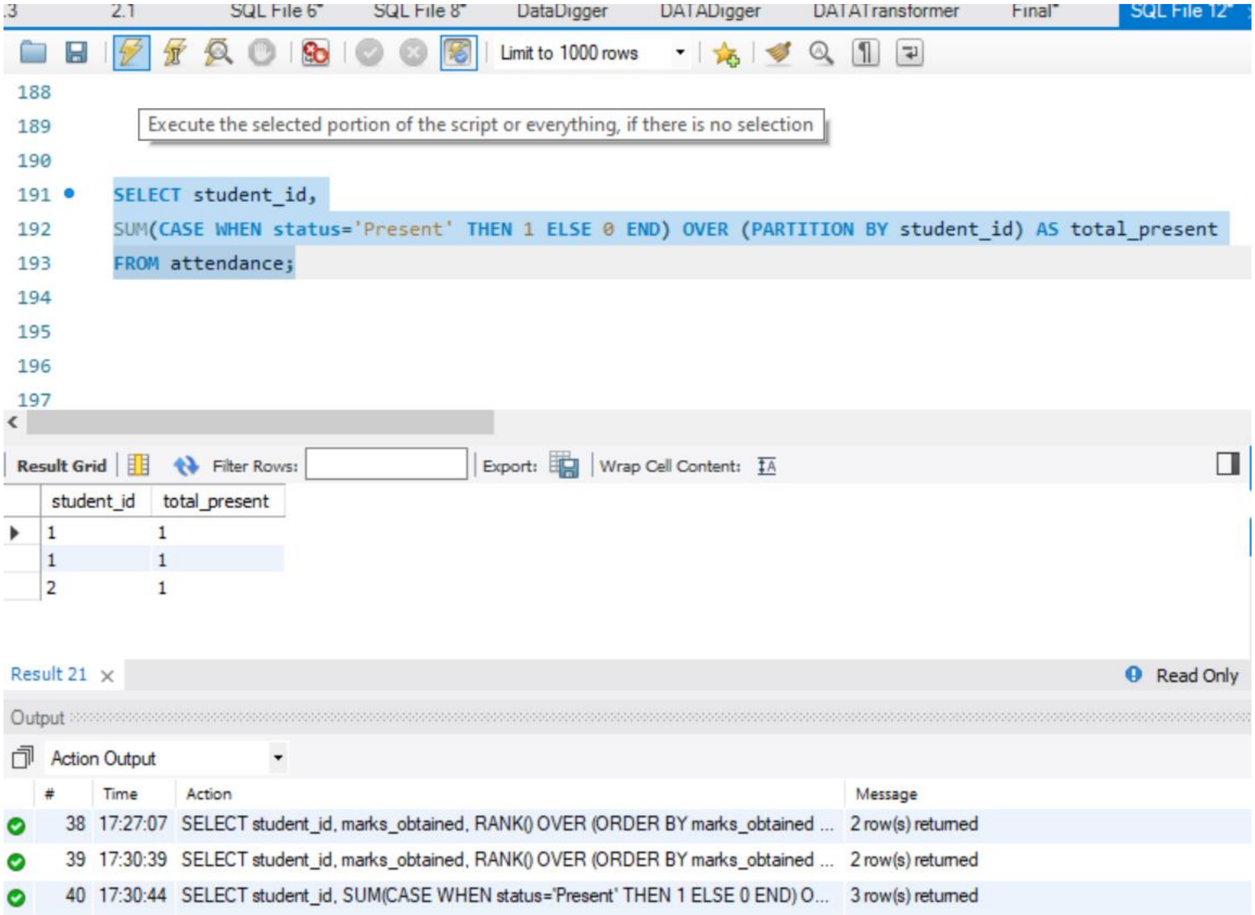
#	Time	Action	Message
35	17:25:39	SELECT UPPER(name) FROM faculty LIMIT 0, 1000	2 row(s) returned
36	17:26:06	SELECT TRIM(name) FROM students LIMIT 0, 1000	2 row(s) returned
37	17:26:34	SELECT name, IFNULL(email, 'Email Not Provided') FROM students LIMIT 0, 1000	2 row(s) returned



```sql
SELECT TRIM(name) FROM students;


SELECT name, IFNULL(email, 'Email Not Provided') FROM students;


SELECT student_id, marks_obtained,
RANK() OVER (ORDER BY marks_obtained DESC) AS rank_no
FROM grades;

```

student_id	marks_obtained	rank_no
1	95	1
2	70	2

```
#   Time      Action                                                                Message
36  17:26:06  SELECT TRIM(name) FROM students LIMIT 0, 1000                         2 row(s) returned
37  17:26:34  SELECT name, IFNULL(email, 'Email Not Provided') FROM students LIMIT 0, 1000   2 row(s) returned
38  17:27:07  SELECT student_id, marks_obtained, RANK() OVER (ORDER BY marks_obtained ...   2 row(s) returned
```

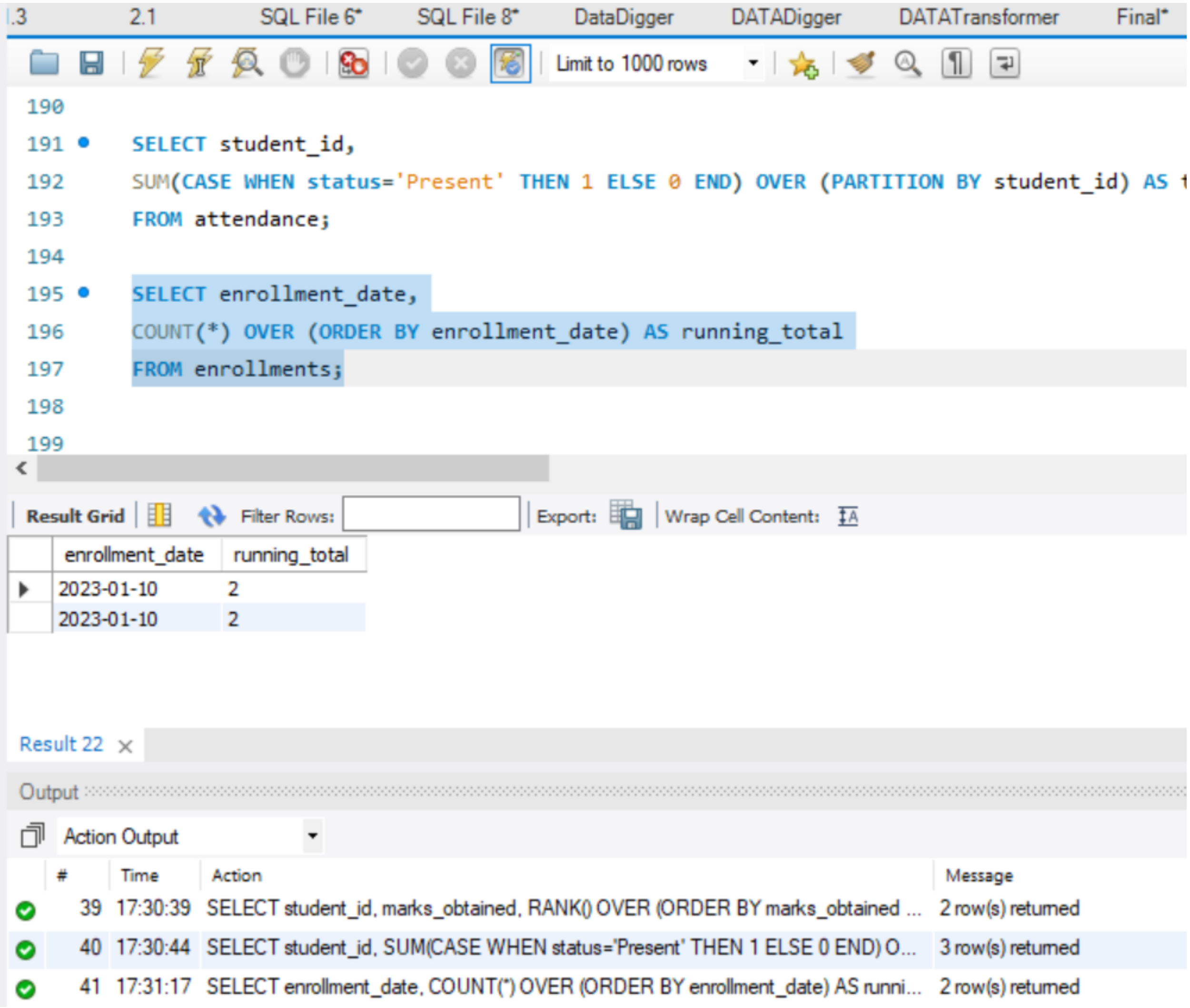


Execute the selected portion of the script or everything, if there is no selection

```sql
SELECT student_id,
SUM(CASE WHEN status='Present' THEN 1 ELSE 0 END) OVER (PARTITION BY student_id) AS total_present
FROM attendance;
```

student_id	total_present
1	1
1	1
2	1

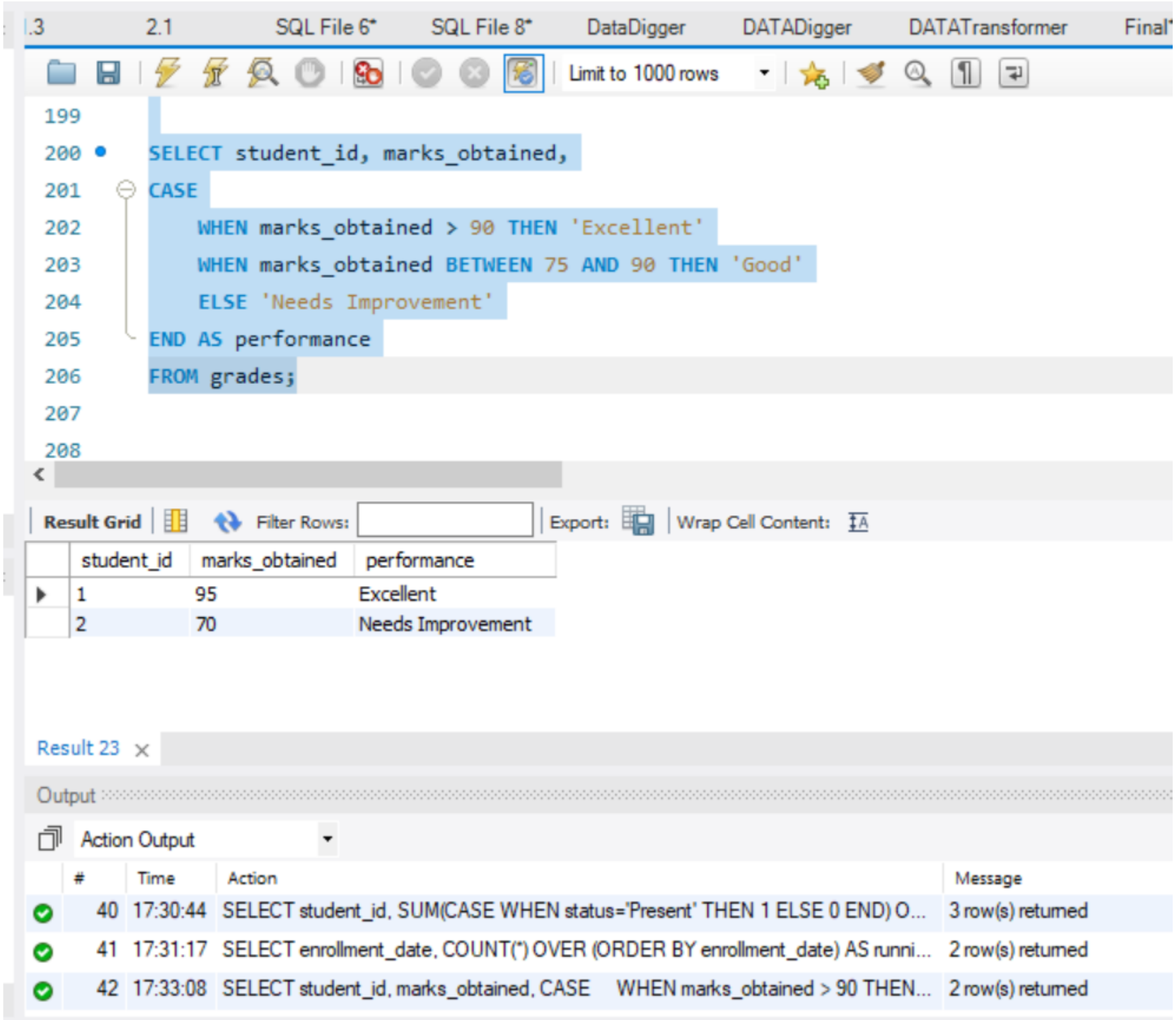
#	Time	Action	Message
38	17:27:07	SELECT student_id, marks_obtained, RANK() OVER (ORDER BY marks_obtained ...	2 row(s) returned
39	17:30:39	SELECT student_id, marks_obtained, RANK() OVER (ORDER BY marks_obtained ...	2 row(s) returned
40	17:30:44	SELECT student_id, SUM(CASE WHEN status='Present' THEN 1 ELSE 0 END) O...	3 row(s) returned



```sql

SELECT student_id,
SUM(CASE WHEN status='Present' THEN 1 ELSE 0 END) OVER (PARTITION BY student_id) AS t
FROM attendance;

SELECT enrollment_date,
COUNT(*) OVER (ORDER BY enrollment_date) AS running_total
FROM enrollments;


```

enrollment_date	running_total
2023-01-10	2
2023-01-10	2

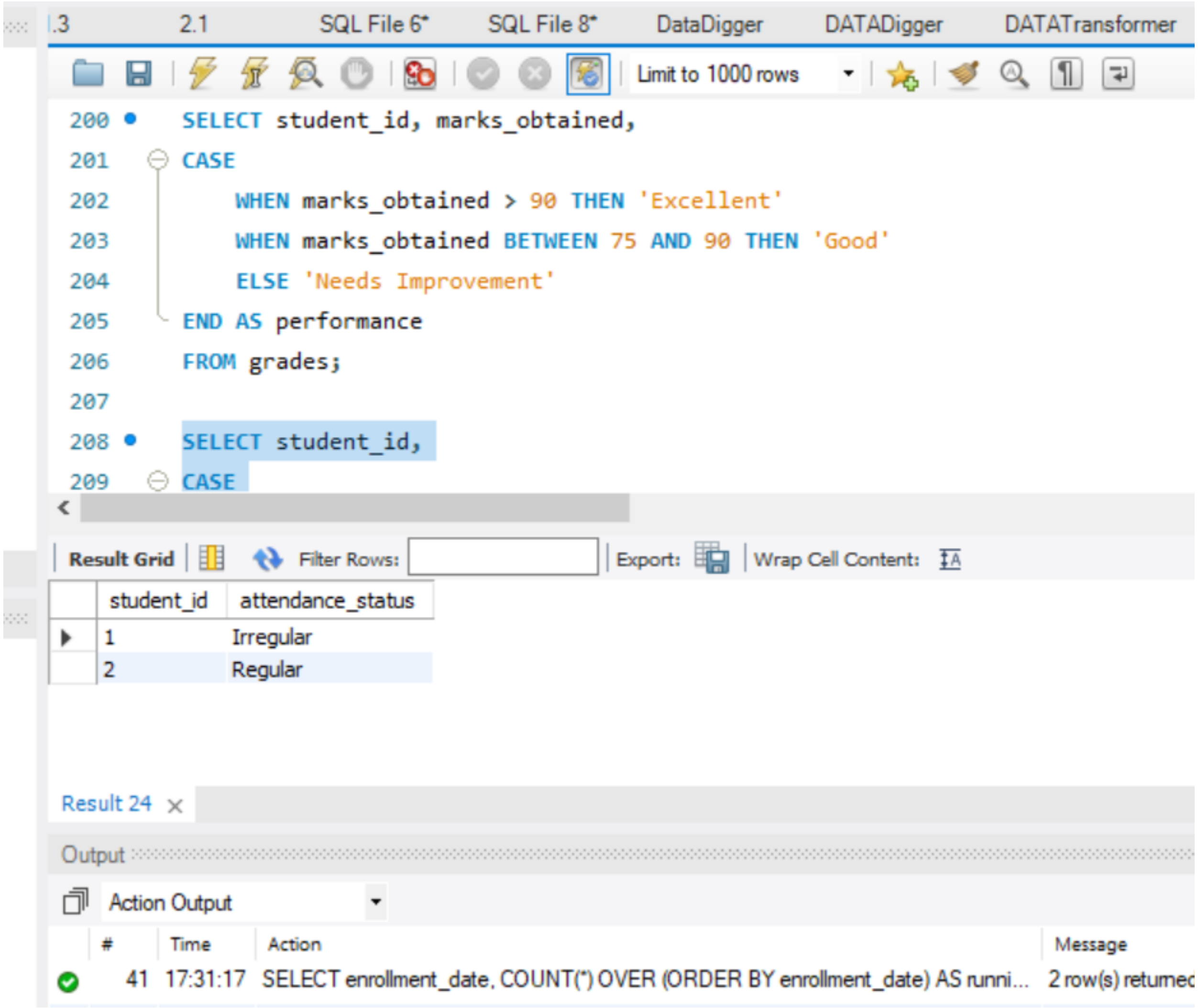
#	Time	Action	Message
39	17:30:39	SELECT student_id, marks_obtained, RANK() OVER (ORDER BY marks_obtained ...	2 row(s) returned
40	17:30:44	SELECT student_id, SUM(CASE WHEN status='Present' THEN 1 ELSE 0 END) O...	3 row(s) returned
41	17:31:17	SELECT enrollment_date, COUNT(*) OVER (ORDER BY enrollment_date) AS runni...	2 row(s) returned



```sql

SELECT student_id, marks_obtained,
CASE
    WHEN marks_obtained > 90 THEN 'Excellent'
    WHEN marks_obtained BETWEEN 75 AND 90 THEN 'Good'
    ELSE 'Needs Improvement'
END AS performance
FROM grades;


```

student_id	marks_obtained	performance
1	95	Excellent
2	70	Needs Improvement

#	Time	Action	Message
40	17:30:44	SELECT student_id, SUM(CASE WHEN status='Present' THEN 1 ELSE 0 END) O...	3 row(s) returned
41	17:31:17	SELECT enrollment_date, COUNT(*) OVER (ORDER BY enrollment_date) AS runni...	2 row(s) returned
42	17:33:08	SELECT student_id, marks_obtained, CASE WHEN marks_obtained > 90 THEN...	2 row(s) returned



```sql
SELECT student_id, marks_obtained,
CASE
    WHEN marks_obtained > 90 THEN 'Excellent'
    WHEN marks_obtained BETWEEN 75 AND 90 THEN 'Good'
    ELSE 'Needs Improvement'
END AS performance
FROM grades;

SELECT student_id,
CASE
```

student_id	attendance_status
1	Irregular
2	Regular

#	Time	Action	Message
41	17:31:17	SELECT enrollment_date, COUNT(*) OVER (ORDER BY enrollment_date) AS runni...	2 row(s) returned