

Description:

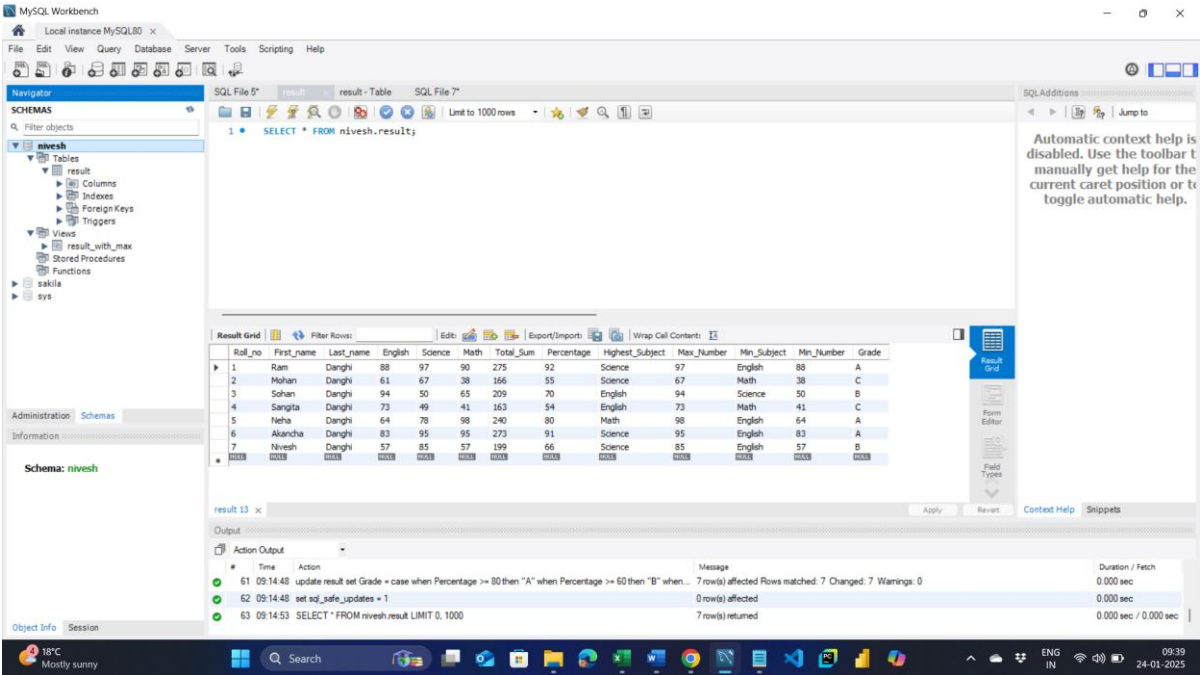
This project is a fundamental one, where I first designed a student's result table in Excel. Later, I replicated the same table in MySQL using structured query language (SQL) commands, showcasing the seamless integration between the two platforms.

EXCEL

S.NO	NAME	SUBJECT				FULL MARKS	Obtains marks	AVERAGE	PERCENTAGE	MAX	MIN	GRADE	MAX_SUBJECT
		ENGLISH	SST	MATH	SCIENCE								
1	RAM	88	97	90	90	400	365	91	91%	97	88	A	97   SST
2	MOHAN	61	67	90	32	400	250	63	63%	90	32	B	90   MATH
3	SOHAN	94	50	65	59	400	268	67	67%	94	50	B	94   ENGLISH
4	SANGITA	73	49	41	48	400	211	53	53%	73	41	C	73   ENGLISH
5	NEHA	64	78	98	98	400	338	85	85%	98	64	A	98   MATH
6	AKANCHA	83	95	95	45	400	318	80	80%	95	45	B	95   SST
7	NIVESH	57	85	57	75	400	274	69	69%	85	57	B	85   SST
8	DHANGI	34	35	40	38	400	147	37	37%	40	34	FAIL	40   MATH

S.NO	Fill data	
NAME	Fill data	
ENGLISH	Fill data	
SST	Fill data	
MATH	Fill data	
SCIENCE	Fill data	
FULL MARKS	Fill data	
Obtains marks	=SUM(C5:F5)	
AVERAGE	=AVERAGE(C5:F5)	
PERCENTAGE	=H5/G5	Convert number format Percentage
MAX	=MAX(C5:F5)	
MIN	=MIN(C5:F5)	
GRADE	=IF(J5>=80%,"A",IF(J5>=60%,"B",IF(J5>=40%,"C","FAIL")))	
MAX_SUBJECT	=MAX(C5:F5)&"   "&INDEX(\$C\$4:\$F\$4,(MATCH(MAX(C5:F5),C5:F5,0)))	

MySQL



1. Create Database, Create Table:

```
create database Nivesh;
CREATE TABLE `nivesh`.`result` (
  `Roll_No` INT NOT NULL,
  `First_Name` VARCHAR(45) NOT NULL,
  `last_Name` VARCHAR(45) NOT NULL,
  `English` INT NOT NULL,
  `Science` INT NOT NULL,
  `Math` INT NOT NULL,
  PRIMARY KEY (`Roll_No`),
  UNIQUE INDEX `Roll_No_UNIQUE` (`Roll_No` ASC) VISIBLE)
COMMENT = 'Class Result';
```

2. Fill Data:

```
INSERT INTO `nivesh`.`result` (`Roll_No`, `First_Name`, `last_Name`, `English`, `Science`, `Math`)
VALUES
('1', 'Ram', 'Nath', '89', '96', '56'),
('2', 'Sita', 'Dhang', '70', '96', '42'),
('3', 'Gita', 'Dhang', '58', '45', '57'),
('4', 'Nikita', 'Dhang', '65', '87', '51'),
('5', 'Nivesh', 'Sharma', '87', '36', '53'),
('6', 'Ramesh', 'Sharma', '65', '58', '68'),
('7', 'Mahesh', 'Kumar', '72', '59', '95'),
('8', 'Suresh', 'Kumar', '44', '45', '53'),
('9', 'Neha', 'Kumari', '58', '75', '56'),
('10', 'Sangita', 'Mandal', '95', '86', '75');
```

3. Add Full\_Marks Column:

```
ALTER TABLE `nivesh`.`result`
ADD COLUMN `Full_Marks` INT GENERATED ALWAYS AS (((`English`+`Science`)+`math`)) VIRTUAL AFTER `Math`;
```

4. Add Percentage Column:

```
ALTER TABLE `nivesh`.`result`
ADD COLUMN `Percentage` INT GENERATED ALWAYS AS (((`Full_Marks`/300)*100)) VIRTUAL AFTER `Full_Marks`;
```

5. Add Max\_Number & Max\_Subject:

```
alter table result add column Max_Subject varchar(500);

set sql_safe_updates=0;
update result
set Max_Subject = case
when English = Greatest(English, Science, Math) then "English"
When Science = Greatest(English, Science, Math) then "Science"
When Math = Greatest(English, Science, Math) then "Math"
end;
set Max_Number = Greatest(English, Science, Math);
set sql_safe_updates=1;

alter table result add column Max_Number int;
set sql_safe_updates=0;
update result
set Max_Number = Greatest(English, Science, Math);
set sql_safe_updates=1;
```

6. Add Min\_Number & Min\_Subject:

```
alter table result add column Min_Subject varchar(500);
alter table result add column Min_Number int;

set sql_safe_updates=0;
update result
set Min_Subject = case
```

```
set sql_safe_updates=0;
update result
set Min_Number = Greatest(English, Science, Math);
set sql_safe_updates=1;
```

```
alter table result add column Grade varchar(10);
set sql_safe_updates = 0;
update result
set Grade = case
when Percentage >= 80 then "A"
when Percentage >= 60 then "B"
when Percentage >= 40 then "C"
else "Fail"
end;
set sql_safe_updates = 1;
```

Result Grid													
Filter Rows:													
Edit:													
Export/Import:													
Wrap Cell Content:													
Roll_No	First_Name	Last_Name	English	Science	Math	Full_Marks	Percentage	Max_Subject	Max_Number	Min_Subject	Min_Number	Grade	
1	Ram	Nath	89	96	56	241	80	Science	96	Math	96	A	
2	Sita	Dhang	70	96	42	208	69	Science	96	Math	96	B	
3	Gita	Dhang	58	45	57	160	53	English	58	Science	58	C	
4	Nikita	Dhang	65	87	51	203	68	Science	87	Math	87	B	
5	Nivesh	Sharma	87	36	53	176	59	English	87	Science	87	C	
6	Ramesh	Sharma	65	58	68	191	64	Math	68	Science	68	B	
7	Mahesh	Kumar	72	59	95	226	75	Math	95	Science	95	B	
8	Suresh	Kumar	44	45	53	142	47	Math	53	English	53	C	
9	Neha	Kumari	58	75	56	189	63	Science	75	Math	75	B	
10	Sangita	Mandal	95	86	75	256	85	English	95	Math	95	A	
result 1	result 7												