

Results Messages						
	Student_Id	Student_Firstname	Student_Lastname	Student_DOB	Student_Email	Student_Phone
1	1	Amit	Sharma	2000-05-12	amit.sharma@example.com	9876543210
2	2	Priya	Verma	1999-08-25	priya.verma@example.com	8765432109
3	3	Raj	Patel	2001-02-18	raj.patel@example.com	7654321098
4	4	Sneha	Rao	2000-11-30	sneha.rao@example.com	6543210987
5	5	Vikram	Singh	1998-07-10	vikram.singh@example.com	5432109876
6	6	Anjali	Nair	2002-03-22	anjali.nair@example.com	4321098765
7	7	Rohan	Das	2001-06-15	rohan.das@example.com	3210987654
8	8	Kavya	Iyer	1999-12-05	kavya.iyer@example.com	2109876543
9	9	Arjun	Mishra	2000-09-20	arjun.mishra@example.com	1098765432
10	10	Meera	Reddy	2001-04-08	meera.reddy@example.com	9876543201
11	11	John	Doe	1995-08-15	john.doe@example.com	1234567890

Results Messages				
	Teacher_Id	Teacher_Firstname	Teacher_Lastname	Teacher_Email
1	1	Rahul	Sharma	rahul.sharma@example.com
2	2	Neha	Verma	neha.verma@example.com
3	3	Amit	Patel	amit.patel@example.com
4	4	Sneha	Rao	sneha.rao@example.com
5	5	Vikram	Singh	vikram.singh@example.com
6	6	Anjali	Nair	anjali.nair@example.com
7	7	Rohan	Das	rohan.das@example.com
8	8	Kavya	Iyer	kavya.iyer@example.com
9	9	Arjun	Mishra	arjun.mishra@example.com
10	10	Meera	Reddy	meera.reddy@example.com

Results Messages				
	Course_Id	Course_Name	Credits	Teacher_Id
1	1	Mathematics	4	1
2	2	Physics	3	2
3	3	Chemistry	4	3
4	4	Biology	3	6
5	5	Computer Science	5	5
6	6	English	2	6
7	7	History	3	7
8	8	Economics	4	8
9	9	Psychology	3	9
10	10	Philosophy	2	10

Results Messages				
	Enrollment_Id	Student_Id	Course_Id	Enrollment_Date
1	1	1	1	2024-01-15
2	2	2	2	2024-02-10
3	3	3	3	2024-03-05
4	4	4	4	2024-04-01
5	5	5	5	2024-05-12
6	6	6	6	2024-06-18
7	7	7	7	2024-07-22
8	8	8	8	2024-08-09
9	9	9	9	2024-09-14

Results Messages				
	Course_Id	Course_Name	Credits	Teacher_Id
1	1	Mathematics	4	1
2	2	Physics	3	2
3	3	Chemistry	4	3
4	4	Biology	3	3
5	5	Computer Science	5	5
6	6	English	2	6
7	7	History	3	7
8	8	Economics	4	8
9	9	Psychology	3	9
10	10	Philosophy	2	10

Results Messages						
	Student_Id	Student_Firstname	Student_Lastname	Student_DOB	Student_Email	Student_Phone
1	1	Amit	Sharma	2000-05-12	amit.sharma@example.com	9876543210
2	2	Priya	Verma	1999-08-25	priya.verma@example.com	8765432109
3	4	Sneha	Rao	2000-11-30	sneha.rao@example.com	6543210987
4	5	Vikram	Singh	1998-07-10	vikram.singh@example.com	5432109876
5	6	Anjali	Nair	2002-03-22	anjali.nair@example.com	4321098765
6	7	Rohan	Das	2001-06-15	rohan.das@example.com	3210987654
7	8	Kavya	Iyer	1999-12-05	kavya.iyer@example.com	2109876543
8	9	Arjun	Mishra	2000-09-20	arjun.mishra@example.com	1098765432
9	10	Meera	Reddy	2001-04-08	meera.reddy@example.com	9876543201
10	11	John	Doe	1995-08-15	john.doe@example.com	1234567890

Results Messages				
	Payment_Id	Student_Id	Amount	Payment_Date
	1	1	5000	2024-01-20
	2	2	5500	2024-02-15
	4	4	5200	2024-04-05
	5	5	5100	2024-05-18
	6	6	5300	2024-06-22
	7	7	4700	2024-07-25
	8	8	4900	2024-08-12
	9	9	5000	2024-09-19
	10	10	4600	2024-10-25

```

50
51 --1.Total Payments Made by a Specific Student
52
53 SELECT S.Student_Firstname, S.Student_Lastname,
54 SUM(P.Amount) AS Total_Payment
55 FROM Students S
56 JOIN Payments P ON S.Student_Id = P.Student_Id
57 WHERE S.Student_Id = 10
58 GROUP BY S.Student_Firstname, S.Student_Lastname
59
60 --2.Courses with the Count of Students Enrolled
61
62 SELECT C.Course_Name, COUNT(E.Student_Id) AS Student_Count
63 FROM Courses C
64 LEFT JOIN Enrollment E ON C.Course_Id = E.Course_Id

```

Results Messages

Student_Firstname	Student_Lastname	Total_Payment
Meera	Reddy	4600

```

65 GROUP BY C.Course_Name
66
67 --3. Students Who Have Not Enrolled in Any Course
68
69 select s.student_firstname, s.student_lastname
70 from students s
71 left join enrollment e on s.student_id = e.student_id
72 where e.student_id is null
73
74 --4.Students and the courses they are enrolled in

```

Results Messages

student_firstname	student_lastname
Meera	Reddy
John	Doe

```

75
76 --5.Teachers and their assigned courses
77
78 select t.teacher_firstname, t.teacher_lastname, c.course_name
79 from teachers t
80 join courses c on t.teacher_id = c.teacher_id
81
82 --6.List of students and their enrollment dates for a specific course

```

Results Messages

teacher_firstname	teacher_lastname	course_name
Rahul	Sharma	Mathematics
Neha	Verma	Physics
Amit	Patel	Chemistry
Amit	Patel	Biology
Vikram	Singh	Computer Science
Anjali	Nair	English
Rohan	Das	History
Kavya	Iyer	Economics
Arjun	Mishra	Psychology

```

81 join courses c on t.teacher_id = c.teacher_id
82
83 --6.List of students and their enrollment dates for a specific course
84
85 select s.student_firstname, s.student_lastname, e.enrollment_date
86 from students s
87 join enrollment e on s.student_id = e.student_id
88 join courses c on e.course_id = c.course_id
89 where c.course_id = 1
90
91 --7.Students who have not made any payments

```

Results Messages

student_firstname	student_lastname	enrollment_date
Amit	Sharma	2024-01-15
Priya	Verma	2024-02-10
Sneha	Rao	2024-04-01
Vikram	Singh	2024-05-12
Anjali	Nair	2024-06-18
Rohan	Das	2024-07-22
Kavya	Iyer	2024-08-09
Arjun	Mishra	2024-09-14

```

51
52 SELECT S.Student_Firstname, S.Student_Lastname,
53 SUM(P.Amount) AS Total_Payment
54 FROM Students S
55 JOIN Payments P ON S.Student_Id = P.Student_Id
56 WHERE S.Student_Id = 10
57 GROUP BY S.Student_Firstname, S.Student_Lastname;

```

Results Messages

Student_Firstname	Student_Lastname	Total_Payment
Meera	Reddy	4600

```

59
60 --2.Courses with the Count of Students Enrolled
61
62 SELECT C.Course_Name, COUNT(E.Student_Id) AS Student_Count
63 FROM Courses C
64 LEFT JOIN Enrollment E ON C.Course_Id = E.Course_Id
65 GROUP BY C.Course_Name;
66
67 --3. Students Who Have Not Enrolled in Any Course

```

Results Messages

Course_Name	Student_Count
Biology	1
Chemistry	0
Computer Science	1
Economics	1
English	1
History	1
Mathematics	1
Philosophy	0
Physics	1

```

72
73 --4.Students and the courses they are enrolled in
74
75 select s.student_firstname, s.student_lastname, c.course_name
76 from students s
77 join enrollment e on s.student_id = e.student_id
78 join courses c on e.course_id = c.course_id
79
80 --5.Teachers and their assigned courses
81
82 select t.teacher_firstname, t.teacher_lastname, c.course_name

```

Results Messages

student_firstname	student_lastname	course_name
Amit	Sharma	Mathematics
Priya	Verma	Physics
Sneha	Rao	Biology
Vikram	Singh	Computer Science
Anjali	Nair	English
Rohan	Das	History
Kavya	Iyer	Economics
Arjun	Mishra	Psychology

```

89 --7.Students who have not made any payments
90 select s.student_firstname, s.student_lastname
91 from students s
92 left join payments p on s.student_id = p.student_id
93 where p.student_id is null
94

```

7 %

Results Messages

student_firstname	student_lastname
John	Doe

```

94
95 --8.Courses that have no enrollments
96 select c.course_name
97 from courses c
98 left join enrollmeant e on c.course_id = e.course_id
99 where e.course_id is null
100 --9.students enrolled in more than one course

```

7 %

Results Messages

course_name
Chemistry
Philosophy

```

99 where e.course_id is null
100 --9.students enrolled in more than one course
101 select s.student_firstname, s.student_lastname,
102 count(e.course_id) as course_count
103 from students s
104 join enrollmeant e on s.student_id = e.student_id
105 group by s.student_firstname, s.student_lastname
106 having count(e.course_id) > 0
107 --10.Teachers who are not assigned to any courses
108 select t.teacher_firstname, t.teacher_lastname

```

results Messages

student_firstname	student_lastname	course_count
Rohan	Das	1
Kavya	Iyer	1
Arjun	Mishra	1
Anjali	Nair	1
Sneha	Rao	1
Amit	Sharma	1
Vikram	Singh	1
Priya	Verma	1

```

106 having count(e.course_id) > 0
107 --10.Teachers who are not assigned to any courses
108 select t.teacher_firstname, t.teacher_lastname
109 from teachers t
110 left join courses c on t.teacher_id = c.teacher_id
111 where c.teacher_id is null
112
113 -----
114

```

%

Results Messages

teacher_firstname	teacher_lastname
Sneha	Rao

```

115 --1.Average number of students enrolled in each course
116 select avg(student_count) as avg_students_per_course
117 from (select course_id, count(student_id) as student_cou
118 from enrollmeant group by course_id)
119 as course_enrollmeant
120 --2.Student(s) who made the highest payment

```

7 %

Results Messages

avg_students_per_course
1

```

119 as course_enrollmeant
120 --2.Student(s) who made the highest payment
121 select s.student_firstname, s.student_lastname, p.amount
122 from students s
123 join payments p on s.student_id = p.student_id
124 where p.amount = (select max(amount) from payments)
125 --3.Courses with the highest number of enrollments
126

```

Results Messages

student_firstname	student_lastname	amount
Priya	Verma	5500

```

124 where p.amount = (select max(amount) from payments)
125 --3.Courses with the highest number of enrollments
126
127 select c.course_name, count(e.student_id) as enrollment_
128 from courses c
129 join enrollmeant e on c.course_id = e.course_id
130 group by c.course_id, c.course_name
131 having count(e.student_id) = (select max(enrollment_count
132 from (select count(student_id) as enrollment_count
133 from enrollmeant group by course_id)
134 as enrollments_per_course)
135

```

%

Results Messages

course_name	enrollment_count
Mathematics	1
Physics	1
Biology	1
Computer Science	1
English	1
History	1
Economics	1
Psychology	1

```

136 --4.Total payments made to courses taught by each teacher
137 select t.teacher_firstname, t.teacher_lastname,
138 (select sum(p.amount) from payments p
139 join enrollmeant e on p.student_id = e.student_id
140 join courses c on e.course_id = c.course_id
141 where c.teacher_id = t.teacher_id) as total_payment
142 from teachers t
143
144 --5.Students enrolled in all available courses

```

.7 %

Results Messages

teacher_firstname	teacher_lastname	total_payment
Rahul	Sharma	5000
Neha	Verma	5500
Amit	Patel	5200
Sneha	Rao	NULL
Vikram	Singh	5100
Anjali	Nair	5300
Rohan	Das	4700
Kavya	Iyer	4900
Arun	Mishra	5000

```

149 (select count(course_id) from courses)
150
151 --6.Teachers who have not been assigned to any courses
152 select teacher_firstname, teacher_lastname
153 from teachers
154 where teacher_id not in
155 (select distinct teacher_id from courses)
156

```

7 %

Results Messages

teacher_firstname	teacher_lastname
Sneha	Rao

```

156
157 --7.Average age of all students
158 select avg(datediff(year, student_dob, getdate()))
159 as avg_age
160 from students
161
162 --8.Identify courses with no enrollments

```

7 %

Results Messages

avg_age
25

```

160 from students
161
162 --8.Identify courses with no enrollments
163
164 select course_name
165 from courses
166 where course_id not in (select course_id from
167 enrollmeant)
168 --9.Total payments made by each student for each cou
169
170 select student_id, course_id,
171 (select sum(amount) from payments p

```

%

Results Messages

course_name
Chemistry
Philosophy

```

168 --9.Total payments made by each student for each course
169
170 select student_id, course_id,
171 (select sum(amount) from payments p
172 where p.student_id = e.student_id) as total_payment
173 from enrollmeant e
174

```

%

Results Messages

student_id	course_id	total_payment
1	1	5000
2	2	5500
4	4	5200
5	5	5100
6	6	5300
7	7	4700
8	8	4900
9	9	5000

```
174
175 --10. Identify students who made more than one payment
176
177 select student_id
178 from payments
179 group by student_id
180 having count(payment_id) > 0
181 --11.Total payments made by each student
182
183 select s.student_id, s.student_firstname, sum(p.amount)
```

7 %

Results Messages

student_id
1
2
4
5
6
7
8
9
10

```
180 having count(payment_id) > 0
181 --11.Total payments made by each student
182
183 select s.student_id, s.student_firstname, sum(p.amount)
184 from students s
185 join payments p on s.student_id = p.student_id
186 group by s.student_id, s.student_firstname
187 --12.
188
189
```

%

Results Messages

student_id	student_firstname	total_payment
1	Amit	5000
2	Priya	5500
4	Sneha	5200
5	Vikram	5100
6	Anjali	5300
7	Rohan	4700
8	Kavya	4900
9	Arjun	5000
10	Meera	4600

```

186 group by s.student_id, s.student_firstname
187 --12.List of courses with student count
188
189 select c.course_name, count(e.student_id) as student_cou
190 from courses c
191 left join enrollmeant e on c.course_id = e.course_id
192 group by c.course_name
193
194

```

%

Results Messages

course_name	student_count
Biology	1
Chemistry	0
Computer Science	1
Economics	1
English	1
History	1
Mathematics	1
Philosophy	0
Physics	1

```

194 --13.Average payment amount by students
195
196 select s.student_id, avg(p.amount) as avg_payment
197 from students s
198 join payments p on s.student_id = p.student_id
199 group by s.student_id;
200
201

```

%

Results Messages

student_id	avg_payment
1	5000
6	5300
9	5000
8	4900
10	4600
2	5500
7	4700
4	5200
5	5100