```python
a, b = 8, 28

if a < b:
    start = b
else:
    start = a

end = a * b

for x in range(start, end + 1):
    if (x % a == 0) and (x % b == 0):
        print(x)
        break
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

56

DBMS

Section Id :	64065321948
Section Number :	5 Online
Section type :	Mandatory
Mandatory or Optional :	18 18 50 Yes
Number of Questions :	No
Number of Questions to be attempted :	
Section Marks :	
Display Number Panel :	
Group All Questions :	
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Maximum Instruction Time : 0 1

Sub-Section Number : 64065349197

Sub-Section Id : No

Question Shuffling Allowed :

Question Number : 70 Question Id : 640653346867 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "DATABASE MANAGEMENT SYSTEMS"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?
CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531153053. YES

6406531153054. NO

Sub-Section Number : 2

Sub-Section Id : 64065349198

Question Shuffling Allowed : Yes

Question Number : 71 Question Id : 640653346868 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Which among the following levels of abstraction describes the information about the data stored in the database and the relationships among the data fields?

Options :

6406531153055. Physical level

6406531153056. Logical level

6406531153057. View level

6406531153058. None of these

Question Number : 72 Question Id : 640653346869 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 2 Question Label : Multiple Choice Question The ability to modify the physical schema without changing the logical schema is known as

_____

Options :

6406531153059. Logical Data Independence

6406531153060. Physical Data Independence

6406531153061. View Data Independence

6406531153062. None of these

Question Number : 73 Question Id : 640653346870 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Which among the following is used for accessing and manipulating the data organized by the appropriate data model?

Options :

6406531153063. Data Definition Language

6406531153064. Data Manipulation Language

6406531153065. Data Control Language

6406531153066. Transaction Control Language

Question Number : 74 Question Id : 640653346876 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the relation **student** shown in Table 8.

roll_no	name	house_name
1	John	Nilgiri
2	Ramesh	Nilgiri
3	Dilip	Arawali
4	Suresh	Shiwalik
5	Kiran	Udaygiri
6	Vijay	Nilgiri

Table 8: Relation **student**

Which of the following SQL command is used to provide INSERT authorization of the table **student** to **instructor**.

Options :

6406531153087.
```
CREATE ROLE instructor;
GRANT INSERT ON instructor TO student;
```

6406531153088.
```
CREATE ROLE instructor;
GRANT student INSERT TO instructor;
```

6406531153089.
```
CREATE ROLE instructor;
GRANT ROLE INSERT ON student TO instructor;
```

6406531153090.
```
CREATE ROLE instructor;
GRANT INSERT ON student TO instructor;
```

Question Number : 75 Question Id : 640653346878 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the relational schema given below.
instructor$(id, name, dept\_name, salary)$

Choose the correct SQL command to create a view XYZ, by selecting two columns *name* and *dept_name* from the instructor relation. Select those instructors having names starting with 'S' and from the 'Music' department.

Options :

6406531153092.

```
CREATE VIEW XYZ(name,dept_name) AS
SELECT name,dept_name from instructor
where name like 'S%' AND dept_name='Music'
```

6406531153093.

```
CREATE VIEW XYZ(name,dept_name) TO
SELECT name,dept_name from instructor
where name like 'S%' AND dept_name='Music'
```

6406531153094.

```
CREATE VIEW XYZ(name,dept_name) ON
SELECT name,dept_name from instructor
where name like 'S%' AND dept_name='Music'
```

6406531153095.

```
CREATE VIEW XYZ(name,dept_name) AS
SELECT name,dept_name from instructor
where name like '%S' AND dept_name='Music'
```

Question Number : 76 Question Id : 640653346880 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the relations shown in Figure 1.

Customers

cid	cname	cage
C101	Stefen	30
C202	Jacob	36
C403	Nicolas	29
C204	Edward	40
C105	Stewart	27

Orders

oid	cid	amount
122	C101	40000
222	C202	20000
111	C403	30000
233	C403	25000

Figure 1: Relations **Customers** and **Orders**

Which of the following expressions will fetch the given tuple?

cname
Stefen

Options :

6406531153100. $\prod_{cname}(\sigma_{cage \leq 30 \ \wedge \ amount \leq 30000}(Customers \bowtie Orders))$

6406531153101. $\prod_{cname}(\sigma_{cage > 30 \ \vee \ amount > 30000}(Customers \bowtie Orders))$

6406531153102. $\prod_{cname}(\sigma_{cage \geq 30 \ \wedge \ amount > 30000}(Customers \bowtie Orders))$

6406531153103. $\prod_{cname}(\sigma_{cage \geq 30 \ \vee \ amount \leq 30000}(Customers \bowtie Orders))$

Sub-Section Number : 3

Sub-Section Id : 64065349199

Question Shuffling Allowed : Yes

Question Number : 77 Question Id : 640653346871 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the relation **R** shown in Table 1:

A	B	C
1	a	4
1	a	2
2	c	4
3	d	2
2	c	1

Table 1: Relation **R**

What is the output of the following relational algebra expression?

$\Pi_{x.B}(\sigma_{x.A=y.C}(\rho_x(R) \times \rho_y(R)))$

Options :

6406531153067.

B
a
a
c
c
c
c

6406531153068.

B
a
c

6406531153069.

B
a
c
d

6406531153070.

B
a
a
c
d
c

Question Number : 78 Question Id : 640653346872 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the relation **Product** shown in Table 3:

p_id	p_name	price
P1	Sunscreen cream	30
P2	Face Wash	40
P3	Tooth Paste	10
P4	Brush	20
P5	Comb	NULL
P6	Carry bag	0
P7	Olive Oil	NULL

Table 3: Relation **Product**

Identify the output for the following SQL statement.

```
SELECT AVG(price) FROM Product;
```

Options :

6406531153071. 14.29

6406531153072. 16.67

6406531153073. 20.00

6406531153074. 25.00

Question Number : 79 Question Id : 640653346873 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the relation **Player** shown in Table 4:

p_id	player_name	Age	goal_score
P1	Aabhi	32	49
P2	Naba	21	28
P3	Sam	19	22
P4	Lee	24	18
P5	Baba	23	31
P6	Karan	28	37
P7	Mahabir	25	32
P8	Aakash	20	42

Table 4: Relation **Player**

Result table:

p_id	player_name	Age	goal_score
P1	Aabhi	32	49
P6	Karan	28	37
P8	Aakash	20	42

Choose the correct SQL statement that will return the given resultant table.

Options :

6406531153075.

```
SELECT * FROM Player
WHERE Age >= 20 AND
goal_score >=( SELECT AVG(goal_score) - MIN(goal_score) FROM Player)
```

6406531153076.

```
SELECT * FROM Player
WHERE Age > 20 AND
goal_score >= (SELECT AVG(goal_score) FROM Player)
```

6406531153077.

```
SELECT * FROM Player
WHERE Age >= 20 AND
goal_score >= (SELECT AVG(goal_score) FROM Player)
```

6406531153078.

```
SELECT * FROM Player
WHERE Age >= 20 AND
goal_score >=( SELECT MAX(goal_score) - AVG(goal_score) FROM Player)
```

Question Number : 80 Question Id : 640653346875 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the relation **student** shown in Table 7.

roll_no	name	house_name
1	John	Nilgiri
2	Ramesh	Nilgiri
3	Dilip	Arawali
4	Suresh	Shiwalik
5	Kiran	Udaygiri
6	Vijay	Nilgiri

Table 7: Relation **student**

What will the output of the following query be?

```
SELECT e.name AS student_name
FROM student e,
        (SELECT house_name, COUNT(*) AS house_count
         FROM student
         GROUP BY house_name) AS dc
WHERE e.house_name = dc.house_name
AND dc.house_count>2
```

Options :

6406531153083.

student_name
John
Ramesh

6406531153084.

student_name
Ramesh
Dilip

6406531153085.

student_name
John
Ramesh
Vijay

6406531153086.

student_name
Vijay

Question Number : 81 Question Id : 640653346879 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the relational schemas given below.
customer(*c_id*, *c_name*, *contact_no*, *address*)
product(*p_id*, *p_name*, *product_type*, *price*)
order(*o_id*, *c_id*, *p_id*, *date*)

Table **order** having two foreign keys *c_id* and *p_id*.
Identify the appropriate "CREATE TABLE" statement for table **order**.

Options :

6406531153096.

```
CREATE TABLE order(
varchar(10) o_id primary key,
varchar(10) c_id,
varchar(10) p_id,
DATE date,
FOREIGN KEY(c_id) REFERENCES customer,
FOREIGN KEY(p_id) REFERENCES product)
```

6406531153097.

```
CREATE TABLE order(
o_id varchar(10) primary key,
c_id varchar(10),
p_id varchar(10),
date DATE,
FOREIGN KEY(p_id) REFERENCES customer,
FOREIGN KEY(c_id) REFERENCES product)
```

6406531153098.

```
CREATE TABLE order(
o_id varchar(10),
c_id varchar(10) primary key,
p_id varchar(10),
date DATE,
FOREIGN KEY(c_id) REFERENCES customer,
FOREIGN KEY(p_id) REFERENCES product)
```

6406531153099.

```
CREATE TABLE order(
o_id varchar(10) primary key,
c_id varchar(10),
p_id varchar(10),
date DATE,
FOREIGN KEY(c_id) REFERENCES customer,
FOREIGN KEY(p_id) REFERENCES product)
```

Sub-Section Number :	4
Sub-Section Id :	64065349200
Question Shuffling Allowed :	Yes

Question Number : 82 Question Id : 640653346874 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the relations A and B shown in Table 5 and Table 6 respectively:

x	y
1	a
2	a
3	b
4	c
5	b

Table 5: Relation A

w	z
4	a
5	b
6	b
7	c
8	a
9	a
10	b

Table 6: Relation B

What will be the number of tuples in the resulting table?

```
SELECT y FROM A
UNION ALL
SELECT z FROM B
EXCEPT ALL
SELECT z FROM B
```

Options :

6406531153079. 0

6406531153080. 3

6406531153081. 4

6406531153082. 5

Question Number : 83 Question Id : 640653346881 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the relations shown in Figure 2.

Students

sname	course_id	sec_id
Sklivia	DBMS	A
James	Python	A
Shawn	Maths	C
Sklivia	Python	C
James	DBMS	B
Jass	DBMS	A
Shawn	Python	B

Course_Section

course_id	sec_id
DBMS	A
Python	C

Figure 2: Relations **Students** and **Course_Section**

What will the output of the operation **Students** ÷ **Course_Section** be?

Options :

6406531153104. James

6406531153105. Shawn

6406531153106. Sklivia

6406531153107. Jass

Question Number : 84 Question Id : 640653346882 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the following relational schema and answer the question that follows.

Account *(ac_no, branch_name, balance)*
Branch *(branch_name, address)*
Customer *(c_num, ac_no, branch_name, name, address)*

Which of the following queries is equivalent to the statement given below?

Find the name of those customers who have an account at the 'ICICI Bank' and an account balance more than 50000.

Options :

6406531153108. $\{T \mid \exists C \in Customer, \exists A \in Account\ (C.ac\ no = A.ac\ no \wedge C.branch\ name = \text{“}ICICIBank\text{”} \wedge A.balance > 50000 \wedge C.branch\ name = A.branch\ name \wedge T.name = C.name)\}$

6406531153109. $\{T \mid \exists C \in Customer, \exists A \in Account\ (C.ac\_no = A.ac\_no \vee C.branch\_name = \text{“}ICICIBank\text{”} \wedge A.balance > 50000 \vee C.branch\_name = A.branch\_name \wedge T.name = C.name)\}$

6406531153110. $\{T \mid \exists C \in Customer\ (C.ac\_no = A.ac\_no \wedge C.branch\_name = \text{“}ICICIBank\text{”} \vee A.balance > 50000)\}$

6406531153111. $\{T \mid \exists C \in Customer, \exists A \in Account\ (C.ac\_no = A.ac\_no \vee C.branch\_name = \text{“}ICICIBank\text{”} \vee A.balance > 50000 \vee C.branch\_name = A.branch\_name)\}$

Question Number : 85 Question Id : 640653346883 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the following E-R Diagram.

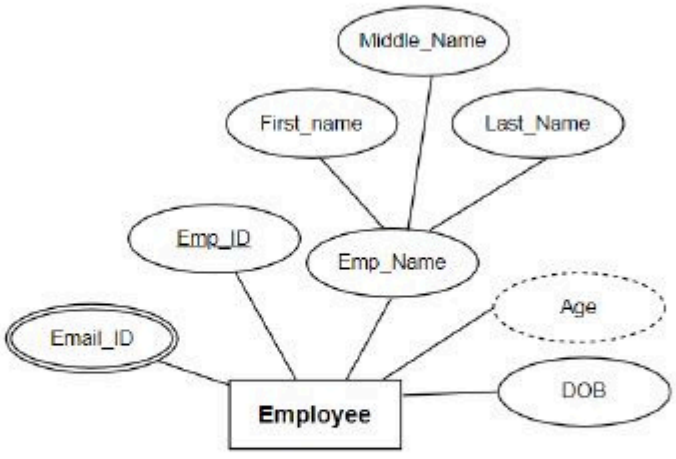


Figure 3: E-R Diagram

Which among the following is the equivalent of the given E-R diagram?

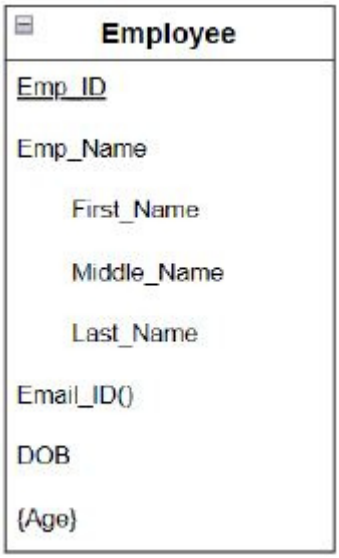
Options :

6406531153112.

6406531153113.

6406531153114.

6406531153115.



Sub-Section Number : 5

Sub-Section Id : 64065349201

Question Shuffling Allowed : Yes

Question Number : 86 Question Id : 640653346884 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Select Question

Consider the E-R diagram for a B.Sc. Degree Course Project database as given in Figure 4.

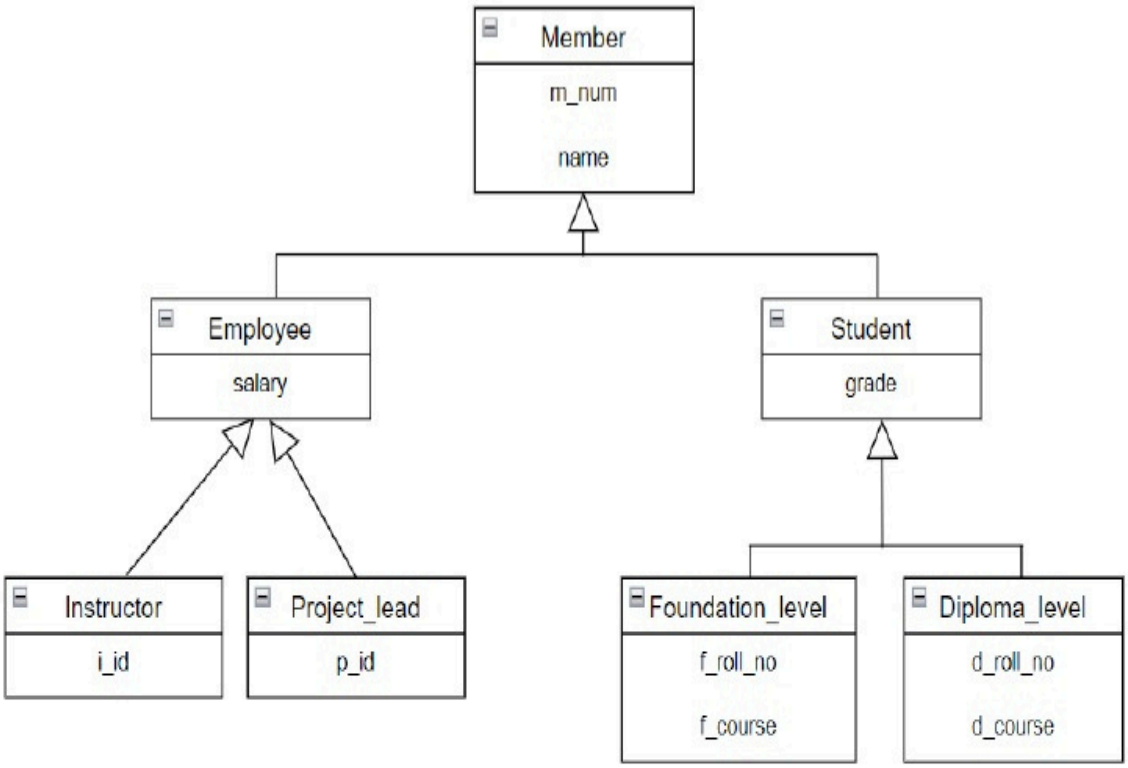


Figure 4: E-R Diagram

Which of the following statement describes the correct relation between the given entity sets?

Note:

- **Employee** and **Student** are disjoint specializations of **Member**.
- **Instructor** and **Project_lead** are overlapping specializations of **Employee**.
- **Foundation_level** and **Diploma_level** are disjoint specializations of **Student**.

Options :

6406531153116. Each member can be either an employee or a student or just a member of the degree project. However, a member cannot be an employee and a student at the same time.

6406531153117. Each employee can be an instructor or a project lead. However, an employee cannot be an instructor and a project lead at the same time.

6406531153118. Each student can be either a foundation_level student or a diploma_level student or both at the same time.

6406531153119. Each employee can be an instructor or a project lead or both at the same time.

6406531153120. Each member can be either an employee or a student or both at the same time.

Sub-Section Number : 6

Sub-Section Id : 64065349202

Question Shuffling Allowed : Yes

Question Number : 87 Question Id : 640653346877 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

Consider the two relations **student** and **mobile_no** shown in Table 9 and Table 10.

roll_no	name
1	Oliver
2	Jack
3	Harry
4	Thomas

Table 9: Relation **student**

roll_no	contact_no
1	123
2	456
2	131
3	251

Table 10: Relation **mobile_no**

What is the output of the below SQL query?

```
SELECT COUNT(s.roll_no)
FROM student AS s
NATURAL JOIN
mobile_no AS  m
```

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

PDSA

Section Id :	64065321949
Section Number :	6 Online
Section type :	Mandatory
Mandatory or Optional :	17 17 50 Yes
Number of Questions :	No
Number of Questions to be attempted :	
Section Marks :	
Display Number Panel :	
Group All Questions :	
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065349203
Question Shuffling Allowed :	No

Question Number : 88 Question Id : 640653346885 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question