**Statements**

**1**

Implement any one Partitioning technique in Parallel Databases

**2**

Implement Two Phase commit protocol in Distributed Databases

**3**

Design Persistent Objects using JDO and implement queries on objects using JDOQL in ObjectDB NOSQL DATABASE (Any Five)

**JDO TABLE & Queries: STUDENT**

|  |  |  |
| --- | --- | --- |
| **Roll no** | **Name** | **Aggregate** |
| 407001 | Yogesh | 67 |
| 407002 | Bhavna | 75 |
| 407003 | Bakul | 70 |
| 407014 | Nilesh | 71 |
| 407028 | Minal | 66 |
| 407030 | Nikita | 59 |

|  |  |
| --- | --- |
| 1 | Give the count of total number of students |
| 2 | Find out the student who has maximum aggregate |
| 3 | Find out the name of student whose aggregate is 66 |
| 4 | List out names of students in ascending order of their aggregate |
| 5 | Find roll no of student whose name is minal |
| 6 | Find the names of students whose aggregate is in between 68 and 76 |

**4**

Design Persistent Objects using JDO and implement queries on objects using JDOQL in ObjectDB NOSQL DATABASE

**JDO TABLE & Queries: STUDENT**

|  |  |  |
| --- | --- | --- |
| **Roll no** | **Name** | **Aggregate** |
| 407001 | Yogesh | 67 |
| 407002 | Bhavna | 75 |
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| 407028 | Minal | 66 |
| 407030 | Nikita | 59 |

|  |  |
| --- | --- |
| 1 | List the names of students |
| 2 | Find out the roll no of student whose aggregate is greater than 74 |
| 3 | Find out the student who has minimum aggregate |
| 4 | Find out the average aggregate |
| 5 | List out names of students in ascending order of their aggregate |
| 6 | Find the names of students whose aggregate is in between 68 and 76 |

**5**

Create XML, XML schemas , DTD for any database application and implement min 10 queries using XQuery FLOWR expression and XPath (Any Four)

**Schema:**

<Student>

<Firstname>Suraj Sengar</ Firstname >

<Nickname>Jack</ Nickname >

<Marks>77.56</ Marks >

</Student>

**Queries :**

1. Write a query using XQuery FLOWR to retrieve data :Display the first name of the students
2. Write a query using XQuery FLOWR to implement ORDER BY clause: Retrieve nickname with orderby clause
3. Write a query using XQuery FLOWR to implement ORDER BY ASCENDING:Display the first name (Order by ascending ) of the student whose marks are greater than 88
4. Write a query using XQuery FLOWR to retrieve data Using IF ELSE condition:

Display good if marks is less than 88 else excellent along with first name of the student

1. Write a query using XQuery FLOWR to retrieve data Using WHERE clause with AND condition: Display the nickname of the student whose firstname is ‘Jasvir’ and marks is 90
2. Write a query using XQuery FLOWR to list all the Student First Name in an HTML list. (add <ul> and <li> tags to the FLWOR expression) : Display lastname in HTML list

**6**

Implement Two Phase commit protocol in Distributed Databases

**7**

Create XML, XML schemas , DTD for any database application and implement min 10 queries using XQuery FLOWR expression and XPath (Any Four)

**Schema:**

<Student>

<Firstname>Suraj Sengar</ Firstname >

<Nickname>Jack</ Nickname >

<Marks>77.56</ Marks >

</Student>

**Queries :**

1. Write a query using XQuery FLOWR to retrieve data :Display the first name of the students
2. Write a query using XQuery FLOWR to implement ORDER BY clause with where condition: Display the first name (Order by) of the student whose marks are greater than 88
3. Write a query using XQuery FLOWR to implement ORDER BY DESCENDING :Display the first name (Order by Descending ) of the student whose marks are greater than 88
4. Write a query using XQuery FLOWR to retrieve data Using IF ELSE condition:

Display good if marks is less than 88 else excellent along with first name of the student

1. Write a query using XQuery FLOWR to eliminate the title element, and show only the data inside the title element : Display Only data inside title
2. Write a query using XQuery FLOWR to list all the Student First Name in an HTML list. (add <ul> and <li> tags to the FLWOR expression) : Display lastname in HTML list

**8**

Design database schemas and implement queries using Cassandra column based databases (Any Eight)

**9**

Design database schemas and implement queries using Cassandra column based databases (Any Eight)

**10**

Design database schemas and implement min 10 queries using DynamoDBkeyValue based databases (Any Four) :Create customer table Customer and insert data



1. List all inserted items form customer.
2. List details of customer whose customer id is 102 and name “Rajesh kumar”.
3. Update customer table by adding one attribute Product.
4. Delete customer with customer id 104 and Name Madhuri
5. Display all details of customer whose List the customer id is 104.

**11**

Design database schemas and implement min 10 queries using DynamoDBkeyValue based databases (Any four): Create customer table Customer and insert data



1. List all inserted items form customer.
2. Give the address and zipcode of customer whose customer id is 102 and name “RaKesh kumar”.
3. Give the city of customer whose customer id is 102 and name “Rakesh kumar”.
4. Display all details of customer whose List the customer id is 104.
5. Update customer table by adding one attribute Product.
6. Delete customer with customer id 104 and Name Madhuri

**12**

Implement Web Page ranking algorithm

**13**

Implement Web Page ranking algorithm

**14**

Implement any one machine learning algorithm for classification / clustering task in BIG data Analytics

**15**

Implement any one Partitioning technique in Parallel Databases

**16**

Implement any one machine learning algorithm for classification / clustering task in BIG data Analytics