SOLUTION-:

1)

```
import java.util.*;
public class Unique {
	void UniqueString()
	{
		String StringArray[]={"abc","def","ABZ","ASD","Abc"};
	    int n=StringArray.length;
	    //ArrayList<Integer> list=new ArrayList<>();
	    Set<String> hs=new HashSet<>();
	    for(int i=0;i<n;i++)
	    {
	        if(hs.contains(StringArray[i].toLowerCase()))
	        {
	            continue;
	        }
	        else
	        {
	            hs.add(StringArray[i]);
	        }
	    }

	}
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Unique u=new Unique();
		u.UniqueString();

	}

}
```

2)

```
abstract class Market {

  // abstract method
  abstract void getPrice();
  abstract void getProductName();



}
```

4)

```
public class SumIsPresent {
	static boolean search(int arr[], int n, int x)
   {
      for (int i = 0; i < n; i++) {
```

```
        // Return the index of the element if the element
        // is found
        if (arr[i] == x)
            return true;
    }

    // return -1 if the element is not found
    return false;
}

    public static void main(String[] args) {
            // TODO Auto-generated method stub
            int a[]= {2,5,8,9,0,1,7,10};
            for(int i=0;i<a.length;i++)
            {
                int sum=a[i];
                for(int j=i+1;j<a.length;j++)
                {
                    sum+=a[j];
                    if(search(a,a.length,sum))
                    {
                        System.out.println("("+a[i]+","+a[j]+")");
                    }


                }
            }
```

```
	}

}
```

3)

```
import java.util.*;
public class SecondLargest {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner sc=new Scanner(System.in);
		System.out.println("number of elements");
		int n=sc.nextInt();
		int arr[]=new int[n];
		for(int i=0;i<n;i++)
		{
			arr[i]=sc.nextInt();
		}
		int temp;
		 for(int i = 0; i<n; i++ ){
		for(int j = i+1; j<n; j++){

		  if(arr[i]>arr[j]){
```

```
                    temp = arr[i];
                    arr[i] = arr[j];
                    arr[j] = temp;
                  }
                }
              }
              System.out.println("Third second largest number is:: "+arr[n-2]);


          }

}
```

Sql

```
1)      CREATE TABLE Subject(
    id VARCHAR(10) PRIMARY KEY,
            rollno INT,
            subname VARCHAR(20),
            marks INT
);

CREATE TABLE Student(
    id VARCHAR(10),
            rollno INT,
            sname VARCHAR(20),
            address VARCHAR(50),
```

```
        FOREIGN KEY(id) REFERENCES Subject(id)
);

INSERT INTO Subject VALUES('A001', 2863, 'Maths', 80);
INSERT INTO Subject VALUES('A002', 2864, 'Physics', 90);
INSERT INTO Subject VALUES('A003', 2865, 'Chemistry', 50);
INSERT INTO Subject VALUES('A004', 2866, 'Biology', 70);
INSERT INTO Subject VALUES('A005', 2867, 'History', 60);


INSERT INTO Student VALUES('A003', 2865, 'Yash', 'bbsr');
INSERT INTO Student VALUES('A004', 2866, 'Aman', 'jsg');
INSERT INTO Student VALUES('A004', 2866, 'Ayush', 'jsr');
INSERT INTO Student VALUES('A001', 2863, 'Harsh', 'sng');

SELECT subname, COUNT(id) AS 'Total Students' FROM Subject
WHERE subname = 'Biology'
GROUP BY subname;

SELECT SUM(marks) AS TotMarks FROM Subject, Student
WHERE Subject.id = Student.id
AND sname = 'Yash';
```

2) CREATE TABLE Product(

id INT PRIMARY KEY,

name VARCHAR(30),

price INT,

location VARCHAR(30)

);

CREATE TABLE manufacturer(

id INT,

company_name VARCHAR(30),

product_id VARCHAR(5),

address VARCHAR(20),

FOREIGN KEY(id) REFERENCES Product(id)

);

INSERT INTO Product VALUES(1, 'Yash', 100, 'bbsr');

INSERT INTO Product VALUES(2, 'Aman', 200, 'jsg');

INSERT INTO Product VALUES(3, 'Anurag', 50, 'jsr');

INSERT INTO Product VALUES(4, 'Ayush', 300, 'sng');

INSERT INTO Product VALUES(5, 'Harsh', 70, 'bjr');

INSERT INTO manufacturer VALUES(2, 'Virtusa', 'A01', 'khandagiri');

INSERT INTO manufacturer VALUES(3, 'Microsoft', 'A02', 'Patia');

INSERT INTO manufacturer VALUES(3, 'Hexaware', 'A03', 'Udaygiri');

INSERT INTO manufacturer VALUES(1, 'Informatica', 'A04', 'Jagmohan Nagar');

INSERT INTO manufacturer VALUES(4, 'Meta.net', 'A05', 'Bapujinagar');

```
SELECT company_name FROM Product, manufacturer
WHERE Product.id = manufacturer.id
AND product_id = 'A02';
```

HTML

```
<!DOCTYPE html>
<html lang="en">
 <head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>ABC</title>
 </head>
 <body>
  <header style="margin-top: 50px; display: flex">
   <img style="background-color: red" src="
https://tse4.mm.bing.net/th?id=OIP.gfyDNK8piTH7qayJibqHBgAAAA&pid=Api&P=0"
 alt="logo" />
   <h1 style="font-size: 60px; margin-left: 450px; background-color: green">ABC
Products</h1>
  </header>
  <main style="display: flex; margin-top: 100px">
   <div style="flex: 1; background-color: skyblue">
    <ul style="list-style-type: none; margin: 50px">
     <li style="padding: 3px"><a href="">Link 1</a></li>
     <li style="padding: 3px"><a href="">Link 2</a></li>
     <li style="padding: 3px"><a href="">Link 3</a></li>
```

```
        <li style="padding: 3px"><a href="">Link 4</a></li>
        <li style="padding: 3px"><a href="">Link 5</a></li>
        <li style="padding: 3px"><a href="">Link 6</a></li>
      </ul>
    </div>
   <div style="flex: 1; margin-right: 200px; background-color: rgb(253, 255, 110)"> <table style="width:100%; text-align: center; margin: 50px">
<thead>
        <tr>
          <th>product_id</th>
          <th>product_name</th>
          <th>price</th>
          <th>location</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>1</td>
          <td>Product 1</td>
          <td>100</td>
          <td>Bhubaneswar</td>
        </tr>
        <tr>
          <td>2</td>
          <td>Product 2</td>
          <td>110</td>
          <td>Bhubaneswar</td>
```

```
        </tr>
        </tr>
        <tr>
          <td>3</td>
          <td>Product 3</td>
          <td>120</td>
          <td>Bhubaneswar</td>
        </tr>
        </tr>
        <tr>
          <td>4</td>
<td>Product 4</td>
          <td>130</td>
          <td>Bhubaneswar</td>
        </tr>
        </tr>
        <tr>
          <td>5</td>
          <td>Product 5</td>
          <td>140</td>
          <td>Bhubaneswar</td>
        </tr>
      </tbody>
      <tfoot>
        <tr>
          <td>6</td>
          <td>Product 6</td>
```

```
          <td>150</td>
          <td>Bhubaneswar</td>
         </tr>
        </tfoot>
      </table></div>
    </main>
    <footer style="text-align: center; margin-top: 100px; background-color: green">All rights reserved. ABC Products</footer>
  </body>
</html>
```