**Java**

package virtusa;

import java.util.ArrayList;

import java.util.Collections;

import java.util.HashSet;

public class excercise {

static void q1()

{

String StringArray[] = { "abc", "def", "ABZ", "ASD", "Abc" };

int n = StringArray.length;

HashSet<String> hs = new HashSet<>();

for (int i = 0; i < n; i++) {

if (hs.contains(StringArray[i].toLowerCase())) {

continue;

} else {

hs.add(StringArray[i]);

}

}

System.***out***.println(hs);

}

static void q4()

{

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=0;j<a.length;j++)

{

for(int k=j;k<a.length;k++)

{

if(sum==a[j]+a[k])

System.***out***.println(a[j]+" , "+a[k]+" = "+(a[k]+a[j]));

}

}

}

}

static void q3()

{

String [] numString= {"1","2","3","4","5"};

ArrayList<Integer> numInt=new ArrayList<Integer>();

for (int i=0;i<numString.length;i++)

{

numInt.add(Integer.*parseInt*(numString[i]));

}

Collections.*sort*(numInt);

System.***out***.println(numInt.get(numInt.size()-2));

}

public static void main(String[] args) {

// **TODO** Auto-generated method stub

//Question 2

// void q2() {

// abstract class Market {

// // abstract method

// abstract void getPrice();

// abstract void getProductName();

// }

*q1*();//Ques 1

*q3*();//Ques 3

*q4*();//Ques 4

}

}

**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>