**JAVA**

**1. Find unique strings in an array of strings.**

**Input**

**strArray = {“abc”, “def, “ABZ”, “ASD”, “AbC”};**

**Similar strings - include case insensitive**

**output - “abc”, “def”,”ABZ”,”ASD”**

public class Main

{

public static void main(String[] args)

{

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

HashMap<String, Integer>hm=new HashMap<>();

for (String item:arr)

{

String q=item.toLowerCase();

hm.put(q, hm.getOrDefault(q, 0)+1);

}

for(String item:arr)

{

String r=item.toLowerCase();

if(hm.get(r)==1)

{

System.out.println(item);

}

}

}

}

2. **Write a program in Java to create an abstract class market. There are two methods getPrice() and getProductName() as abstract method.**

abstract class Market{

abstract void getPrice();

abstract void getProductName();

}

Class Product extends Market{

int Price;

String Name;

public Market(int Price,String Name){

this.Price=Price;

this.Name=Name;

}

public void getPrice(){

System.out.println(this.Price);

}

public void getProductName(){

System.out.println(this.Name);

}

}

3. **Write a program in Java to find 2nd largetst number in an array of Strings ?**

public class SecondLargest

{

public static int getSecondLargest(int[] a, int total)

{

int temp;

for (int i = 0; i < total; i++)

{

for (int j = i + 1; j < total; j++)

{

if (a[i] > a[j])

{

temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

return a[total-2];

}

public static void main(String args[]){

int a[]={1,2,5,6,3,2};

int b[]={44,66,99,77,33,22,55};

System.out.println("Second Largest: "+getSecondLargest(a,6));

System.out.println("Second Largest: "+getSecondLargest(b,7));

}}

4. **Write a program in Java to find pair of numbers whose sum is a number present in an array of integers?**

**Example - { 2, 5 ,8 ,9, 0,1, 7 , 10}**

**Output - (2,5), (9,1) ,(0,1)**

import java.util.\*;

public class sumPairs

{

public static void main(String[] args)

{

int Sample[] = {2,5,8,9,0,1,7,10};

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

{

for(int j=i+1;j<Sample.length;j++)

{

for(int k =0;k<Sample.length;k++)

{

if(Sample[i]+Sample[j]==Sample[k])

{

System.out.println(Sample[i]+" "+Sample[j]);

}

}

}

}

}

}

**SQL**

**1. create and execute the sql in the tables(mentioned below)**

**Tables**

**Subject ( id , rollno, subjectname , marks)**

**Student (id, rollno, sname, address )**

**Write a SQL query to find the count of all students studying a paticular subject?**

**Write a SQL query to find total marks of a particular student for all subjects?**

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)**

**product(id, name , price ,location)**

**manufacturer( id, company\_name, product\_id, address)**

**Write a SQL query to find company\_name of a particular product and location given input as product \_id?**

**(Use Join statements)**

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**

**Design an html page with following layout as mentioned below (Include CSS as mentioned in diagram color) include table inside content section**

<!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>Assignment</title>

<style>

div.container{

display:grid;

grid-template-columns:18% 78%;

grid-gap:10px;

}

div.nested-item{

display:grid;

grid-template-columns:repeat(1,1fr);

grid-template-rows: 75px 420px 75px;

}

div.main-section{

display:grid;

grid-template-columns:30% 20%;

grid-gap:10px;

}

div.item2{

background-color:green;

padding:10px;

}

div.item3{

background-color:skyblue;

padding:10px;

}

div.item4{

background-color:rgb(169, 205, 50);

padding:10px;

}

</style>

</head>

<body>

<div class="container">

<div class="item1" id="nav" >

Sign up<br>

Home<br>

Product<br>

Help

</div>

<div class="nested-item">

<div class="item2" id="header">

<tr>Site Name</tr>

<tr >Product\_id</tr>

<tr >Product\_name</tr>

<tr >Location</tr>

</div>

<div class="main-section">

<div class="item3" id="artical">

CONTENT

</div>

<div class="item4" id="ads">

</div>

</div>

<div class="item2" id="footer">

Footer

</div>

</div>

</div>

</body>

</html>