

Questions

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"

Solution :

// Java program to implement

// the above approach

import java.io.*;

import java.util.*;

class GFG{

// Function to find the distinct strings

// from the given array

static void findDisStr(List<String> arr, int N)

{

// Stores distinct strings

// from the given array

Set<String> DistString = new HashSet<String>();

// Traverse the array

```

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

    // If current string not
    // present into the set
    if (!DistString.contains(arr.get(i)))
    {

        // Insert current string
        // into the set
        DistString.add(arr.get(i));
    }
}

// Traverse the set DistString
for(String string : DistString)
{

    // Print distinct string
    System.out.print(string + " ");
}
}

// Driver code
public static void main(String[] args)
{
    List<String> arr = Arrays.asList(new String[]{
        "Geeks", "For", "Geeks", "Code", "Coder" });

    // Stores length of the array
    int N = arr.size();

    findDisStr(arr, N);
}
}

```

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

Solution:

```
abstract class Market{  
  
    // abstract method 1  
    abstract void getPrice();  
    // abstract method 2  
    abstract void getProductName();  
  
}
```

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

```
import java.io.*;  
import java.util.*;
```

```
class SecondLargest{  
  
    public static void main(String[] args)  
    {  
        List<String> arr = Arrays.asList(new String[]{  
            "Geeks", "For", "Geeks", "Code", "Coder" });  
        Collections.sort(arr);  
        System.out.println(arr.get(1));  
    }  
}
```

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)

```
public class HelloWorld {
    public static void main(String[] args) {
        int arr[] = {2, 5, 8, 9, 0, 1, 7, 10};
        boolean isSum = false;
        int check = 0;
        while (check < arr.length - 1) {
            for (int i = check + 1; i < arr.length; i++) {
                if (arr[i] == 0) {
                    continue;
                }
                int sum = arr[check] + arr[i];
                if (isPresent(arr, sum, i) == true) {
                    System.out.println(arr[check] + ", " + arr[i]);
                    break;
                }
            }
            check++;
        }
    }

    public static boolean isPresent(int arr[], int sum, int i) {
        for (int k = i; k < arr.length; k++) {
            if (arr[k] == sum) {
                return true;
            }
        }
        return false;
    }
}
```

SQL

2. 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 particular subject?

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

```
create table subject(id varchar(10), rollno int, subjectname
varchar(20), marks int);
create table student(id varchar(20), rollno int, sname varchar(20),
address varchar(20));
```

```
Select distinct subjectname, count(sname)
from student as p
inner join subject as q
on p.id=q.id
group by subjectname
```

```
Select distinct sname, sum(marks)
from student as p
inner join subject as q
on p.id=q.id
group by sname
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,  
    name varchar(20),  
    price int,  
    location varchar(20)  
);  
create table manufacturer(  
    id int,  
    company_name varchar(20),  
    product_id int,  
    address varchar(20)  
  
);  
Select company_name, location  
from manufacturer as p  
inner join product as q  
on p.id=q.id
```

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>ABC</title>
</head>
<body>
  <header style="margin-top: 50px; display: flex">
    
    <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>
          <td>3</td>
          <td>Product 3</td>
          <td>120</td>
          <td>Bhubaneswar</td>
        </tr>
      </tbody>
    </div>
  </main>

```

```
</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>
```

Table-1

product_id	product_name	price	location
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LOGO	SITE NAME		
Signup	CONTENT		
Home			
Product			
Help			