

## Questions

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## 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 static void main(String[] args) {
    String[] strArray = {"abc", "def", "ABZ", "ASD", "AbC"};
    int n = strArray.length;
    List<String> al = new ArrayList<String>();

    for(int i = 0; i < n; i++) {
        int flag = 0;
        for(int j = 0; j < i; j++) {
            if(strArray[i].equalsIgnoreCase(strArray[j])) {
                flag = 1;
                break;
            }
        }
        if(flag == 0) {
            al.add(strArray[i]);
        }
    }
    System.out.println(al);
}
```

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

```

1
2 abstract class Market {
3     abstract double getPrice();
4     abstract String getProductName();
5 }
6

```

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

```

public static final void main(String[] args) {
    int arr[] = {4,2,1,8,7,9};
    int n = arr.length;
    int first = Integer.MIN_VALUE, second = Integer.MIN_VALUE;
    for(int i=0;i<n;i++) {
        if(arr[i] > first) {
            second = first;
            first = arr[i];
        } else if(arr[i] > second && arr[i] != first) {
            second = arr[i];
        }
    }
    System.out.println(second);
}

```

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)

```

int a[] = { 2, 5 ,8 ,9, 0,1, 7 , 10};
int len = a.length;
List<List<Integer>> al = new ArrayList<List<Integer>>();
for(int i=0;i<len;i++) {
    for(int j=0;j<len;j++) {
        if(a[i]!=a[j]) {
            if(Arrays.binarySearch(a, a[i]+a[j]) >= 0) {
                List<Integer> ll = new ArrayList<Integer>();
                ll.add(a[i]);
                ll.add(a[j]);
                al.add(ll);
            }
        }
    }
}
System.out.println(al);

```

## 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?

Select subjectname,count(id) as Count from Student group by subjectname;

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

SELECT SUM(marks) AS TotMarks FROM Subject, Student  
WHERE Subject.id = Student.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)

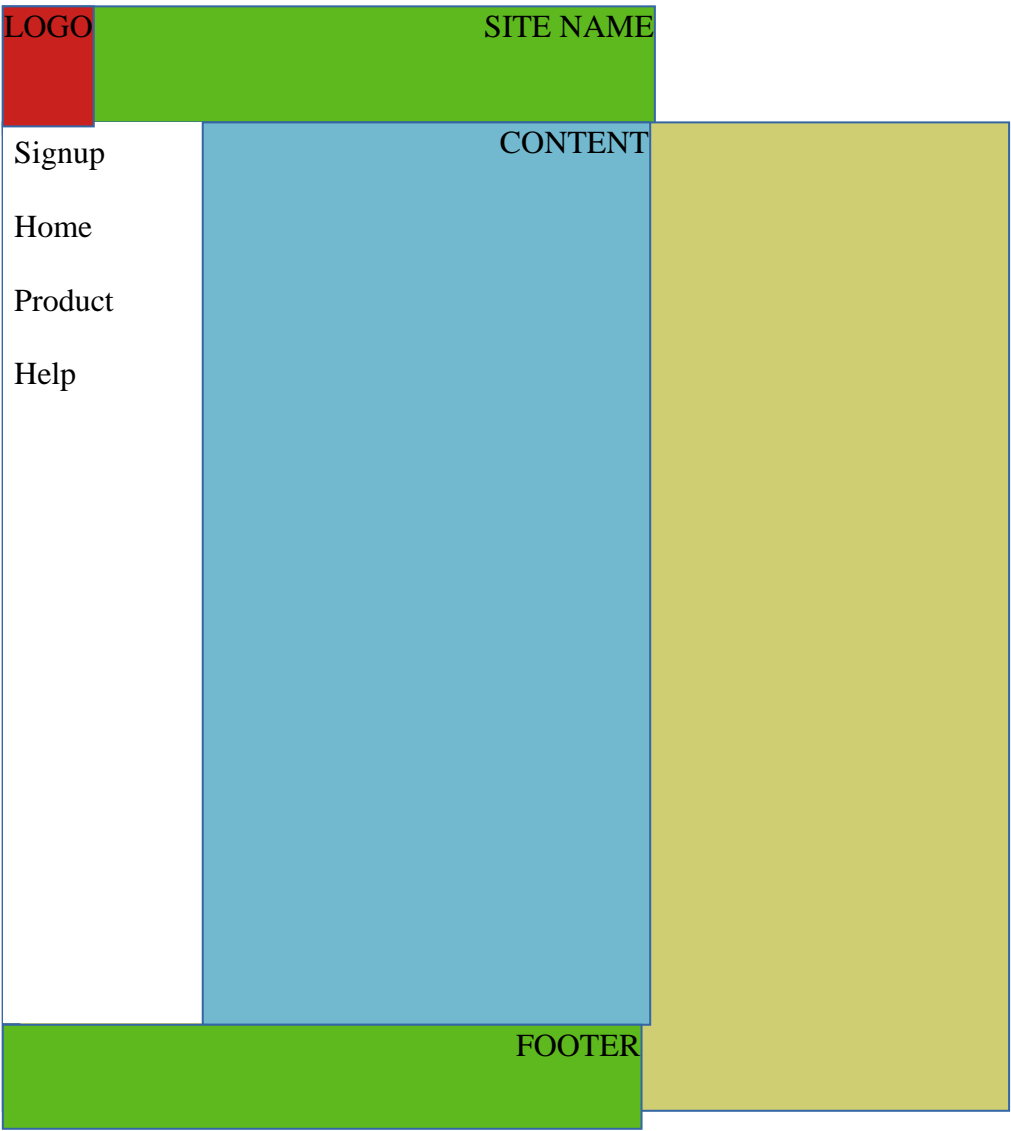
SELECT company\_name FROM Product, manufacturer  
WHERE Product.id = manufacturer.id  
AND product\_id = '9E22R57Y';

## HTML

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

Table-1

product_id	product_name	price	location
------------	--------------	-------	----------



```
<!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>
    <div class="item2" id="footer">
      Footer
    </div>
  </div>

```

</div>

</div>

</body>

</html>