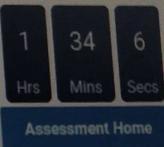


Delta Networks

Scenario:

Delta is one of the leading telecommunications companies. The company provides telecom services throughout the country. Delta had launched its fiber-based broadband services across the country. During the festival season, they make some special offers to their customers. They require software to calculate the plan amount after the discount.

As their software consultant, you can help them by developing a C# application.



Functionalities:

In class **Plan**, implement the below-given properties in **public**.

Class	Properties
Plan	String PlanType
	double PlanAmount

In class **PlanDetails**, implement the below-given methods and also **Inherit** the class **Plan**.

Method	Description

Type here to search

In class **PlanDetails**, implement the below-given methods and also **Inherit** the class **Plan**.

Method	Description
public bool ValidatePlanType()	This method is used to validate the plan type. The PlanType should be " Monthly ", " Quarterly ", or " Annual ", then return true . Otherwise, return false . The PlanType is case-sensitive. If this method returns false , then print "Invalid Plan Type" in Main() method.
public Plan CalulatePlanAmount()	This method is used to calculate the PlanAmount after the discount and return Plan object with PlanType and PlanAmount . The calculation procedures are given below.

Formula :

$$\text{PlanAmount after the discount} = \text{Basic Price} - \text{Discount}$$

Plan Type	Basic Price	Discount
-----------	-------------	----------

Type here to search

Formula :

PlanAmount after the discount = Basic Price - Discount

Plan Type	Basic Price	Discount
Monthly	450	10% of the basic price
Quarterly	1400	20% of the basic price
Annual	2400	50% of the basic price

In **Program** class - **Main** method,

1. Get the values from the user.
2. Use the values in method **ValidatePlanType** and **CalculatePlanAmount**.

Note:

- Keep the properties, methods and classes as **public**.
- Please read the method rules **clearly**.
- Do not use **Environment.Exit()** to terminate the program.
- Do not change the given code template.

Qualifier Assessment Delta Netw X

https://cognizant.tekstac.com/mod/vpl/view.php?id=86636

Cognizant | Gen C LEARN

Sumit Kumar

Sample Input 1:

Enter the plan type

Monthly

Sample Output 1:

Plan type is Monthly

Plan amount is 405

Sample Input 2:

Enter the plan type

Partial

Sample Output 2:

Invalid plan

Type here to search

Qualifier Assessment Delta Netw x

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86636&userid=123309#

File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Plan.cs PlanDetails.cs

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6
7 namespace DeltaNetworks //DO NOT change the namespace name
8 {
9     public class Program //DO NOT change the class name
10    {
11        public static void Main(string[] args) //DO NOT change the 'Main' method signature
12        {
13            //Implement your code here
14        }
15    }
16 }
17 }
```

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Type here to search

Lenovo

Qualifier Assessment Delta Network

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File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Plan.cs PlanDetails.cs

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6
7 namespace DeltaNetworks //DO NOT change the namespace name
8 {
9     public class Plan //DO NOT change the class name
10    {
11        //Implement your code here
12        public string PlanType{get;set;}
13        public double PlanAmount{get;set;}
14
15    }
16 }
```

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Lenovo

[Compile & Run](#)[Evaluate](#)[Restore](#)[Description](#)

Program.cs

Plan.cs

PlanDetails.cs

```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Text;
5  using System.Threading.Tasks;
6
7  namespace DeltaNetworks //DO NOT change the namespace name
8  {
9      public class PlanDetails : Plan //DO NOT change the class name
10     {
11         //Implement your code here
12         public bool ValidatePlanType(){
13             if(PlanType=="Monthly"||PlanType=="Quarterly"||PlanType=="Annual"){
14                 return true;
15             }
16             return false;
17         }
18         public Plan CalulatePlanAmount(){
19             if(PlanType=="Monthly"){
20                 PlanAmount=450-(0.1*450);
21             }
22             else if(PlanType=="Quarterly"){
23                 PlanAmount=1400-(1400*0.2);
24             }
25             else if(PlanType=="Annual"){
26                 PlanAmount=2400-(2400*0.5);
27             }
28         }
29         return this;
30     }
31 }
```



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Qualifier Assessment Mystic Beau X

https://cognizant.tekstac.com/mod/vpl/view.php?id=86640

Cognizant | Gen C LEARN

Sumit Kumar

Mystic Beauty Parlour

Scenario:

Mystic Beauty is a premium beauty parlour that provides a diverse range of high-quality beauty services to help you look and feel your best from head to toe. Our skilled professionals use only the finest products and techniques to deliver stunning results at an affordable cost. As demand for our services has grown, we recognize the need to efficiently manage customer queues to minimize waiting times and improve our overall customer experience. That's why we're excited to introduce our new queue management software, which will help us optimize our customer service and ensure that you receive the best possible care.

As their software consultant, you can help them by developing a C# application.

Functionalities:

In class Program,

`public static Queue<Customer> CustomerQueue` -In the code template, it is already provided.

In class **Customer**, implement the below-given properties and methods.

Data Type	Properties
string	CustomerName

Type here to search

1 32 42
Hrs Mins Secs

Assessment Home

In class **Customer**, implement the below-given properties and methods.

Data Type	Properties
string	CustomerName
long	MobileNumber
string	City
string	Service

Method	Description
public bool AddCustomer(string name, long mobileNo, string city, string service)	This method is used to add the customer details into the CustomerQueue . In this method pass the customer name, phone number, city and service as an argument and add the details in the CustomerQueue and return true. If this method returns true, then print "Customer details added successfully" in Main method.
public string	This method is used to get the customer name with service and return it.

Type here to search

Qualifier Assessment Mystic Bear

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Cognizant | Gen C LEARN

Sumit Kumar

	If this method returns true , then print " Customer details added successfully " in Main method.
<pre>public string GetCustomerNameWithService()</pre>	This method is used to get the customer name with service and return it. Return the first added customer name in uppercase and service in lowercase from CustomerQueue as shown below. Format : SAMcoloring Customer name : Sam Service : Coloring
<pre>public Queue<Customer> RemoveCustomerDetails(long mobileNo)</pre>	This method is used to remove the customer details from the CustomerQueue based on the customer mobile number and return the remaining customer details.

In **Program** class, **Main** method,

1. Get the values from the **user**.
2. Call the methods accordingly and display the result.

Type here to search

Qualifier Assessment Mystic Bear

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Cognizant | Gen C LEARN Sumit Kumar

3. In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the remaining text represents the output.

Note:

- Keep the Properties, methods and class as **public**.
- Please read the method rules **clearly**.
- Do not use **Environment.Exit()** to terminate the program.
- Do not change the given code template.

Sample Input / Output:

Choose the option

1.Add the customer details
2.Get customer name with service
3.Remove customer details
4.Exit

1

Enter the customer name

John

Type here to search

Qualifier Assessment Mystic Bear

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Cognizant | Gen C LEARN

Sumit Kumar

John

Enter the mobile number

7656786789

Enter the city

Chicago

Enter the service

Hair Cutting

Customer details added successfully

Choose the option

- 1.Add the customer details
- 2.Get customer name with service
- 3.Remove customer details
- 4.Exit

1

Enter the customer name

Type here to search

Qualifier Assessment Mystic Bear

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Cognizant | Gen C LEARN

Sumit Kumar

Enter the customer name
Abraham

Enter the mobile number
9878908798

Enter the city
San Francisco

Enter the service
Coloring

Customer details added successfully

Choose the option

1. Add the customer details
2. Get customer name with service
3. Remove customer details
4. Exit

2

Type here to search

Qualifier Assessment Mystic Bear

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Cognizant | Gen C LEARN Sumit Kumar

JOHNhair cutting

Choose the option

- 1.Add the customer details
- 2.Get customer name with service
- 3.Remove customer details
- 4.Exit

3

Enter the mobile number

7656786789

Abraham 9878908798 San Francisco Coloring

Choose the option

- 1.Add the customer details

Type here to search

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Sumit Kumar

Enter the mobile number

7656786789

Abraham 9878908798 San Francisco Coloring

Choose the option

- 1. Add the customer details
- 2. Get customer name with service
- 3. Remove customer details
- 4. Exit

4

Thank you

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Visit the GenC LEARN blog for 'How To' videos and other help related to the

Qualifier Assessment Mystic Bear X

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File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Customer.cs

```
1- using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6
7 namespace MysticBeautyParlour //DO NOT change the namespace name
8 {
9     public class Program //DO NOT change the class name
10    {
11        public static Queue<Customer> CustomerQueue { get; set; } = new Queue<Customer>();
12
13        public static void Main(string[] args) //DO NOT change the method signature
14        {
15            //Implement code here
16        }
17    }
18 }
```

Type here to search

Qualifier Assessment Mystic Bear

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86640&userid=123309#

File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Customer.cs

Program.cs

```
1. using System;
2. using System.Collections.Generic;
3. using System.Linq;
4. using System.Text;
5. using System.Threading.Tasks;
6. namespace MysticBeautyParlour //DO NOT change the namespace name
7. {
8.     public class Customer //DO NOT change the class name
9.     {
10.         //Implement code here
11.         public string CustomerName{get;set;}
12.         public long MobileNumber{get;set;}
13.         public string City{get;set;}
14.         public string Service{get;set;}
15.     }
16.     public bool AddCustomer(string name,long mobileNo,string city,string service)
17.     {
18.         Customer c = new Customer();
19.         c.CustomerName=name;
20.         c.MobileNumber=mobileNo;
21.         c.City=city;
22.         c.Service=service;
23.         Program.CustomerQueue.Enqueue(c);
24.         return true;
25.     }
26.     public Queue<Customer> RemoveCustomerDetails(long mobileNo)
27.     {
28.         Queue<Customer> customerQueue = new Queue<Customer>();
29.         foreach (Customer c in customerQueue)
30.         {
31.             if (c.MobileNumber == mobileNo)
32.             {
33.                 customerQueue.Remove(c);
34.             }
35.         }
36.         return customerQueue;
37.     }
38. }
```

Qualifier Assessment Mystic Bear X +

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86640&userid=123309#

File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Customer.cs

```
123309
18    {
19        Customer c = new Customer();
20        c.CustomerName=name;
21        c.MobileNumber=mobileNo;
22        c.City=city;
23        c.Service=service;
24        Program.CustomerQueue.Enqueue(c);
25        return true;
26    }
27    public Queue<Customer> RemoveCustomerDetails(long mobileNo)
28    {
29        Queue<Customer> q=new Queue<Customer>();
30        while(Program.CustomerQueue.Count>0)
31        {
32            Customer c= Program.CustomerQueue.Dequeue();
33            if(c.MobileNumber != mobileNo)
34            {
35                q.Enqueue(c);
36            }
37        }
38        Program.CustomerQueue=q;
39        return q;
40    }
41    public string GetCustomerNameWithService(){
42        Customer c= Program.CustomerQueue.Peek();
43        return c.CustomerName.ToUpper() + c.Service.ToLower();
44    }
45
46 }
```

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86640&userid=123309#vpl_file1

Type here to search

VST Lite Courier

Scenario:

VST Lite Courier offers domestic express services for delivering documents and small parcels. They provide the service to pick up and deliver within the same city. It is custom-built for the distribution of bulk documents such as mobile or insurance bills, bank statements, and annual general reports, pamphlets, direct mailers, invitation cards, and so on. They require software to calculate the courier's delivery charge and to keep courier records.

As their software consultant, you can help them by developing a C# application.

Functionalities:

In class **Courier**, implement the below-given properties in **public**.

Class	Properties
Courier	<code>DateTime PickUpDate</code> <code>DateTime DeliveryDate</code> <code>String ServiceType</code> <code>double Cost</code>

1 31 6
Hrs Mins Secs

Assessment Home



Type here to search



Lenovo

In class **CourierDetails**, implement the below-given methods and also **Inherit** the class **Courier**.

Method	Description
public void FindServiceType()	<p>This method is used to find the ServiceType based on the PickUpDate and DeliveryDate.</p> <p>If the PickUpDate and DeliveryDate are the same, then assign "SameDay" in the ServiceType property.</p> <p>If the DeliveryDate is within three days from PickUpDate, then assign "Express" in the ServiceType property.</p> <p>If the DeliveryDate is more than three days from PickUpDate, then assign "Standard" in the ServiceType property.</p> <p>If the DeliveryDate is less than PickUpDate, then assign "Invalid" in the ServiceType property.</p> <p>If this method assigned ServiceType is "Invalid", then print "Invalid delivery date" in Main() method.</p>
public double CalculateDeliveryCharge()	<p>This method is used to calculate the delivery charge based on the ServiceType and return it.</p> <p>The calculation procedures are given below.</p>

Type here to search

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Qualifier Assessment VST Lite Co

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Sumit Kumar

Invalid delivery date in Main() method.

public double CalculateDeliveryCharge()	This method is used to calculate the delivery charge based on the ServiceType and return it. The calculation procedures are given below.
---	--

Formula :

Delivery Charge = Cost + Extra charge

Service Type	Extra charge
SameDay	50% of the cost
Express	30% of the cost
Standard	No Extra charge

Note:

ServiceType is Case-sensitive.

The date format is (MM/dd/yyyy).

Type here to search

Qualifier Assessment VST Lite Co X

https://cognizant.tekstac.com/mod/vpl/view.php?id=86646

Cognizant | Gen C LEARN

Sumit Kumar

In Program class - Main method,

1. Get the values from the user.
2. Use the values in method **FindServiceType** and **CalculateDeliveryCharge**.

Note:

- Keep the properties, methods and classes as **public**.
- Please read the method rules **clearly**.
- Do not use **Environment.Exit()** to terminate the program.
- Do not change the given code template.

Sample Input 1:

Enter the pickup date
01/04/2023

Enter the delivery date
01/07/2023

Enter the cost
500

Type here to search

Sample Output 1:

The delivery charge is 650

Sample Input 2:

Enter the pickup date

01/04/2023

Enter the delivery date

01/10/2023

Enter the cost

500

Sample Output 2:

The delivery charge is 500

Sample Input 3:

Enter the pickup date

05/07/2023

Qualifier Assessment VST Lite Co

https://cognizant.tekstac.com/mod/vpl/view.php?id=86646

Cognizant | Gen C LEARN

Sumit Kumar

01/04/2023

Enter the delivery date

01/10/2023

Enter the cost

500

Sample Output 2:

The delivery charge is 500

Sample Input 3:

Enter the pickup date

05/07/2023

Enter the delivery date

05/06/2020

Sample Output 3:

Invalid delivery date

Type here to search

Lenovo

Qualifier Assessment VST Lite Co

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86646&userid=123309#

Save All Compile & Run Evaluate Restore Description

File list

Program.cs
Courier.cs
CourierDetails.cs

Program.cs

```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Text;
5  using System.Threading.Tasks;
6
7  namespace VSTLiteCourier //DO NOT change the namespace name
8  {
9      public class Program //DO NOT change the class name
10     {
11         public static void Main(string[] args) //DO NOT change the 'Main' method signature
12         {
13             //Implement your code here
14         }
15     }
16 }
```

Qualifier Assessment VST Lite Co

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86646&userid=123309#

File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Courier.cs CourierDetails.cs

1• using System;
2• using System.Collections.Generic;
3• using System.Linq;
4• using System.Text;
5• using System.Threading.Tasks;
6•
7• namespace VSTLiteCourier //DO NOT change the namespace name
8• {
9• public class Courier //DO NOT change the class name
10• {
11• //Implement your code here
12• public DateTime PickUpDate{get;set;}
13• public DateTime DeliveryDate{get;set;}
14• public string ServiceType{get;set;}
15• public double Cost{get;set;}
16• }
17• }

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Type here to search

File List Save All Compile & Run Evaluate Restore Description

File list
Program.cs
Courier.cs
CourierDetails.cs

Program.cs Courier.cs CourierDetails.cs

```
1- using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6
7 namespace VSTLiteCourier //DO NOT change the namespace name
8 {
9     public class CourierDetails:Courier //DO NOT change the class name
10    {
11        //Implement your code here
12        public void FindServiceType(){
13            TimeSpan diff=DeliveryDate - PickUpDate;
14            int d=diff.Days;
15
16            if(d==0){
17                ServiceType= "SameDay";
18            }
19            else if(d<0){
20                ServiceType="Invalid";
21            }
22            else if(d<=3){
23                ServiceType="Express";
24            }
25            else if(d>3){
26                ServiceType="Standard";
27            }
28        }
29    }
30 }
```

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86646&userid=123309#vpl_file2



Type here to search

Qualifier Assessment VST Lite Co

<https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86646&userid=123309#>

File List Save All Compile & Run Evaluate Restore Description

File list

Program.cs Courier.cs CourierDetails.cs

```
21     ServiceType="Invalid";
22 }
23 else if(d<=3){
24     ServiceType="Express";
25 }
26 else if(d>3){
27     ServiceType="Standard";
28 }
29 // else if( DeliveryDate<PickUpDate){
30 //     ServiceType="Invalid";
31 // }
32 }
33 
34 public double CalculateDeliveryCharge(){
35     double Charge=0.0;
36     if(ServiceType=="SameDay"){
37         Charge=Cost+0.5*Cost;
38     }
39     else if(ServiceType=="Express"){
40         Charge=Cost+0.3*Cost;
41     }
42     else if(ServiceType=="Standard"){
43         Charge=Cost;
44     }
45 }
46 
47     return Charge;
48 }
49 }
```

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Type here to search

Qualifier Assessment Registration x +

https://cognizant.tekstac.com/mod/vpl/view.php?id=86513

Cognizant | Gen C LEARN

Sumit Kumar

1 29 54
Hrs Mins Secs

Assessment Home

Registration Date (---RETIRED---)

A new policy for boat rides has been implemented, requiring registration for boat rides 10 days prior to the travel date (DOT). Write a query to display the ride_id,sailor_id and date of registration of all the rides taken by sailors on 'FN' shift, If and only if the month of date_of_registration is 'July'. Give an alias name as 'date_of_registration' for the date of registration of boats.

Sort the records based on the ride id in descending order.

(Note: Data is case-sensitive.)

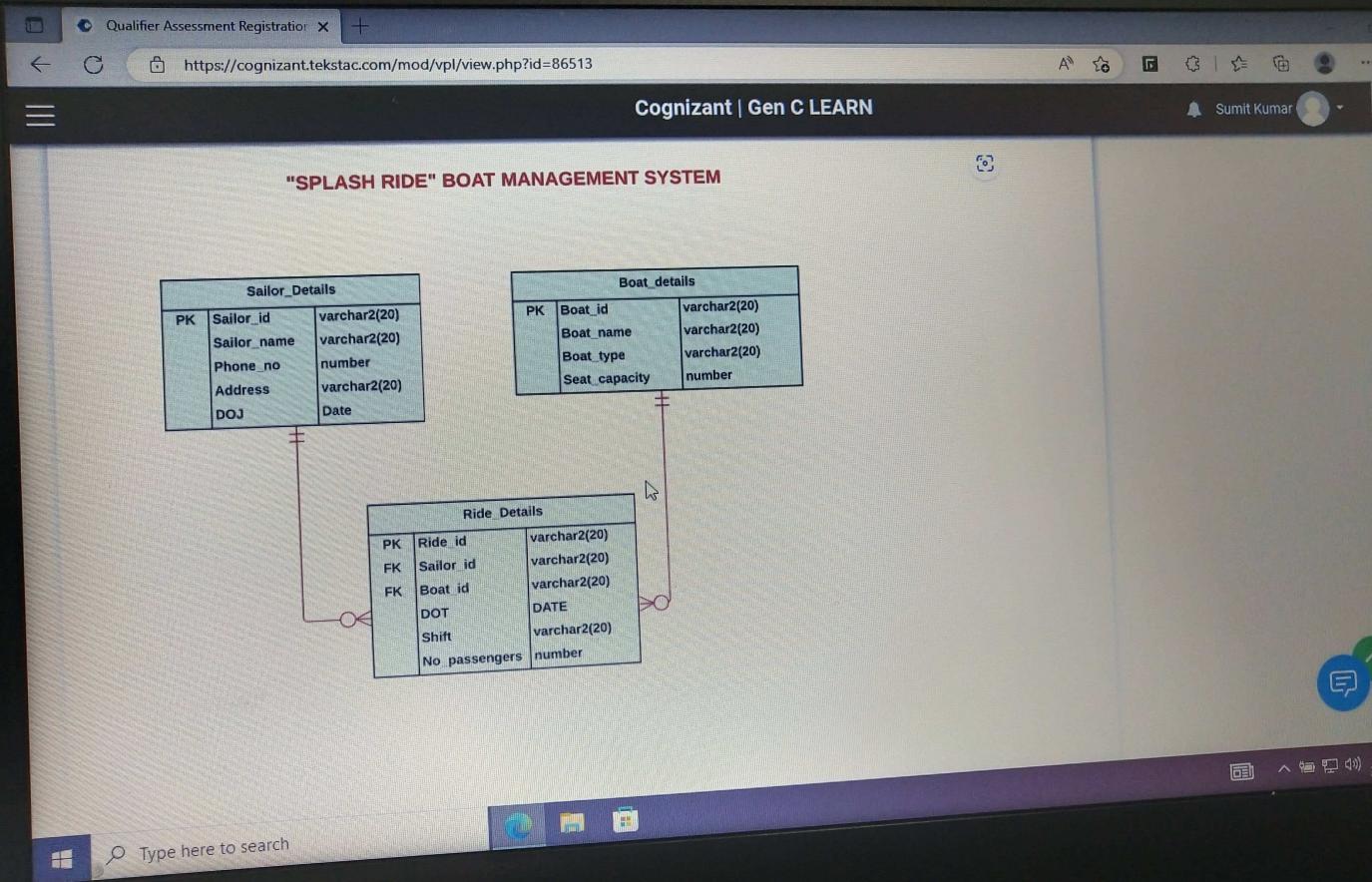
Sample Data:

ride_id	sailor_id	dot	shift
RIDE0107	SA06	2019-08-05	FN
RIDE0203	SA03	2019-08-02	FN
RIDE0801	SA01	2019-07-19	FN
RIDE0109	SA06	2019-09-05	AN

Sample Output:

ride_id	sailor_id	date_of_registration
RIDE0107	SA06	2019-07-26
RIDE0203	SA03	2019-07-23
RIDE0801	SA01	2019-07-09

Type here to search



Type here to search

Lenovo

Qualifier Assessment Registration

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=86513&userid=123309#

File List Save Compile & Run Evaluate Restore Description

File list

sample.sql

sample.sql

```
sample.sql
1 select ride_id,sailor_id, date_sub(dot,interval 10 day) as date_of_registration
2 from ride_details
3 where shift="FN" group by ride_id having month(date_of_registration)=7
4 order by ride_id desc;
```

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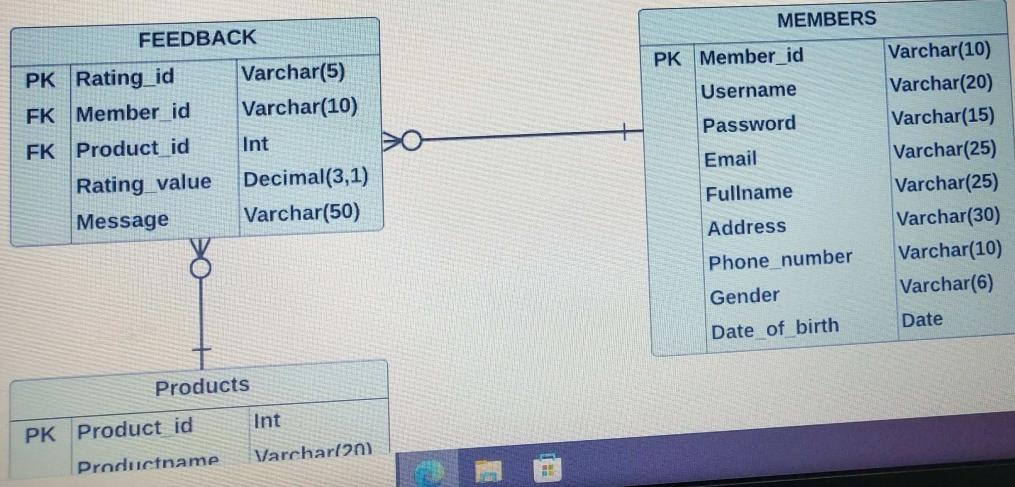
Product Category Details(---RETIRED---)

1 29 15
Hrs Mins Secs

Assessment Home

Write a query to display the unique product name and category of all products with a rating of less than 3.

Sort the results based on the product name in ascending order.



Type here to search

Compile & Run

Evaluate

Restore

Description

sample.sql 

```
1 select distinct p.productname,p.category from products as p join feedback as f
2 on p.product_id = f.product_id
3 where f.rating_value<3
4 order by p.productname;
```

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