

## **CS6852 : Assignment 2 - Ontology Design**



**Group – 05**

**Domain – Restaurant Management**

**XQueries and Xpaths**

**Submitted To -**

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# XQueries:

Q1 : Find the total orders amount in the restaurant on 24 March 2022

```
let $c := sum(for $v in //Customer where $v//Date[Day="24" and Month="March" and Year="2022"] return $v//Order/Amount)
return $c
```

Result: **1902**

Q2 :List all the Beverage Cost above 25

```
for $a in //MenuCard//Item
where $a/Price>25 and count($x/Beverage)>0
order by $a/Price
return $a/Beverage
```

Results:

```
<Beverage>Thumps Up</Beverage>
<Beverage>Coke</Beverage>
<Beverage>Chocolate Shake</Beverage>
<Beverage>Hot Chocolate</Beverage>
<Beverage>Milk</Beverage>
<Beverage>Strawberry Shake</Beverage>
```

Q3 : List all the Customer name and amount with Quarterly subscription

```
for $c in //Customer[Subscription[Details="Quarterly"]]
return ($c/Name,$c/Price)
```

Result:

```
<Name>Rajesh Kumar</Name>
<Price>300</Price>
<Name>Mukesh Kumar</Name>
<Price>300</Price>
<Name>Karan Jaiswal</Name>
<Price>300</Price>
<Name>Goutam Sharma</Name>
<Price>300</Price>
<Name>Soumya Kanth</Name>
<Price>300</Price>
<Name>Ritesh Rane</Name>
<Price>300</Price>
<Name>Divya Rani</Name>
<Price>300</Price>
<Name>Vishal Rawat</Name>
<Price>300</Price>
```

<Name>Pranay Bahekar</Name>  
<Price>300</Price>  
<Name>Pranay Chuttar</Name>  
<Price>300</Price>  
<Name>Pranay Mahajan</Name>  
<Price>300</Price>  
<Name>Nitin Dada</Name>  
<Price>300</Price>  
<Name>Bhagwat Shukla</Name>  
<Price>300</Price>

Q4: Get the average price of starter items  
for \$m in //Menucard  
let \$c := \$m/Starter  
return avg(\$c/\*/price)

Result: **115.71428571428571**

## XPaths:

### 1. /Restaurant/Branch/MenuCard/\*/\*/Beverage

Result:

All the beverage items in the menucard

```
Element='<Food>Chilli Paneer</Food>'
Element='<Food>Paneer 65</Food>'
Element='<Food>Veg Manchurian</Food>'
Element='<Food>Veg Lollipop</Food>'
Element='<Food>Chilli Potato</Food>'
Element='<Food>Chicken Manchurian</Food>'
Element='<Food>Gobi Manchurian</Food>'
```

### 2. /Restaurant/Branch/MenuCard/Starter/Item/Food

RESULTS:

All the fooditems in starter section of menucard

```
Element='<Beverage>Thumps Up</Beverage>'
Element='<Beverage>Coke</Beverage>'
Element='<Beverage>Chocolate Shake</Beverage>'
Element='<Beverage>Hot Chocolate</Beverage>'
Element='<Beverage>Milk</Beverage>'
Element='<Beverage>Strawberry Shake</Beverage>'
```

### 3. /Restaurant/Restaurateur

Result: Restaurateur Details

```
Element='<Restaurateur>
    <Name>Virat Shetty</Name>
    <Contact>
        <PhoneNo>8888000022</PhoneNo>
        <Email>ViratS@gmail.com</Email>
    </Contact>
</Restaurateur>'
```

### 4. /Restaurant/Branch/Staff/Supervisor/Name

RESULTS: Names of all supervisors

```
<Name>Rupesh</Name>
<Name>Rhythm</Name>
<Name>Vansh</Name>
<Name>Nitin</Name>
<Name>Pranab</Name>
```

5. /Restaurant/Branch/Customer/Name[../Subscription/Details="Annual"]

RESULTS: customer names with annual subscription

<Name>Irshad Khan</Name>

<Name>Rashmi Kumari</Name>

<Name>Saurabh Mahajan</Name>

<Name>Samay Raina</Name>