

For our website, we plan on having a feature that allows users to search for dishes that have a good rating (at least 4 stars) from a restaurant that offers a particular cuisine (for example “Italian”). We can also alter the query according to the user’s specific preferences for dish rating and restaurant cuisine.

For some restaurants the cuisine is randomized, which is why non-Italian restaurants show up here.

```
SELECT Temp.name, d.Name  
FROM (SELECT * FROM Restaurant r WHERE r.cuisine = “Italian”) AS Temp  
JOIN Dishes d ON (Temp.restaurantID = d.RestaurantID) JOIN Purchases p ON  
(d.RestaurantID = p.RestaurantID) JOIN Reviews ON (p.NetID = Reviews.NetID)  
WHERE Reviews.Rating >= 4.0;
```

name	Name
McDonald's	243803e3
McDonald's	47679c24
McDonald's	66b4216b
McDonald's	699d3614
McDonald's	243803e3
McDonald's	47679c24
McDonald's	66b4216b
McDonald's	699d3614
Diamond Pizza	18de2c83
Tacombi	2bde3900
Tacombi	5459ae61
Tacombi	8a893157
Buffalo Wild Wings	16b70630
Buffalo Wild Wings	3bda2825
Buffalo Wild Wings	92ae253e
Tacombi	2bde3900
Tacombi	5459ae61
Tacombi	8a893157
Kabobeesh	bb4a8643
Kabobeesh	d2959ff0
Uptown Cabaret	8298a994
Uptown Cabaret	cdf85acc
Cesar's Killer Margaritas - Broadway	d4329231
Triple C Brewing Company	75f0ed9e

For our website, we plan on having a feature that allows users to get a sense for how expensive a restaurant is. Thus, we have an advanced query that will go through every restaurant and compute the average dish price for that restaurant. This will allow the user to understand how much he/she should expect to pay for a dish at that particular restaurant, and make an informed decision as to whether they want to eat at that restaurant. In this advanced query, we join the Restaurant relation with the Dish relation and group by restaurant ID in order to compute the average dish price for each unique restaurant.

```
SELECT r.name, AVG(d.Price)  
FROM Restaurant r JOIN Dishes d ON (r.restaurantID = d.RestaurantID)  
GROUP BY r.restaurantID;
```

Query Result:

name	AVG(d.Price)
Sushi Para II	15.27
Arlee's Raw Blends	26.646666666666665
Aroma Cafe	25.305
Sunny's Diner	17.33
Masala Grill	26.174999999999997
Tarrant's Cafe	21.855
Pearl	18.885
One if by Land, Two if by Sea	33.730000000000004
La Cocina De Agave	28.98
Carytown Burgers & Fries	32.900000000000006
Capital Ale House	25.630000000000003
Stella's	15.83
Valentino's Pizzeria & Trattoria	29.55
Orlando's Taco Shop	27.273333333333333
Subway	24.729999999999997
Manzella's Italian Patio	25.400000000000002
Potbelly Sandwich Shop	22.87
Subway	17.875
Dimitriou's Jazz Alley	32.37