6) Show by week, how many hours each employee works.

select fname, lname, week(shift\_date) as week, sum(hour(subtime(end, start))) as hours\_worked

from scheduled\_shift natural join employee

group by fname, lname;

|  |  |  |  |
| --- | --- | --- | --- |
| **FNAME** | **LNAME** | **WEEK** | **HOURS WORKED** |
| George | Washington | 9 | 4 |
| Kevin | Durant | 9 | 13 |
| John | Kennedy | 9 | 5 |

11) List the five menu items that have generated the most revenue for Miming`s over the past year (365 days).

select dish\_name, round(sum(price), 2) as revenue

from bill\_item

natural join menu\_item natural join menu\_to\_item

where date\_ordered between

DATE\_SUB(now(), INTERVAL 1 year)

and

now()

group by dish\_name

order by sum(price) desc

limit 5;

|  |  |
| --- | --- |
| **dish\_name** | **revenue** |
| Burger | 35.96 |
| Spagetti | 14.99 |
| Tacos | 12.99 |

16) Three additional queries that demonstrate the five additional business rules. Feel free to create additional views to support these queries if you so desire.

/\*Demonstrates business rule 1 and 2 showing that each waitstaff employee has only 1 section

and each section has at most 5 tables\*/

select fname, lname, count(sectionID) as waitstaff\_section\_count, sectionID, count(tableID)

from employee natural join part\_time natural join wait\_staff natural join section natural join `Table`

where employee.empID = wait\_staff.empID

group by fname, lname;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **fname** | **lname** | **waitstaff\_section\_count** | **sectionID** | **count(tableID)** |
| Kobe | Bryant | 2 | 1 | 2 |
| John | Kennedy | 2 | 2 | 2 |

/\*Demonstrates business rule 3 showing that each station has at most 2 line cooks\*/

select station\_name, count(empID)

from station\_assignment

group by station\_name;

|  |  |
| --- | --- |
| **station\_name** | **count(empID)** |
| Entree Station | 1 |
| Salad Station | 1 |
| Soup Station | 1 |

/\*Demonstrates business rule 4 showing that each line cook can have at most 3 stations assigned to them\*/

select fname, lname, ifnull(count(station\_name), 0) as station\_count

from station\_assignment

left outer join line\_cook on station\_assignment.empID = line\_cook.empID

left outer join full\_time on line\_cook.empID = full\_time.empID

left outer join employee on full\_time.empID = employee.empID

where line\_cook.empID = employee.empID

group by fname, lname;

|  |  |  |
| --- | --- | --- |
| **fname** | **lname** | **station\_count** |
| Jorge | Bush | 3 |

/\*Demonstrates business rule 5 showing that each shift has at least 1 maitre d\*/

select count(scheduled\_shift.empID) as maitre\_d\_count, shift\_date, start, end

from scheduled\_shift natural join employee natural join part\_time natural join maitre\_d

where scheduled\_shift.empID = maitre\_d.empID

group by shift\_date, start, end;

|  |  |  |  |
| --- | --- | --- | --- |
| **maitre\_d\_count** | **shift\_date** | **start** | **end** |
| 1 | 3/4/2020 | 8:00:00 | 12:00:00 |
| 1 | 3/4/2020 | 12:00:00 | 17:00:00 |
| 1 | 3/4/2020 | 17:00:00 | 21:00:00 |