

## Unit 6: Homework

1. What are user defined functions and stored procedures? When are they typically used?  
**Stored Procedures are pre-compiled objects which are compiled for the first time and its compiled format is saved, which executes (compiled code) whenever it is called.**

**A function is compiled and executed every time whenever it is called and must also return a value.**

2. Building on our Marketing project ,  
 Calculate the Average Number(Count) of Orders per season ( Seasons as defined in the SQLProject\_When\_ToOffer file)

```
select
if (date_format(OrderDate, "%b") in ('Nov','Dec'),'Holidays', if(date_format(OrderDate,
"%b") in ('Jun','Jul','Aug','Sep'),'Summer','Other') ) as Season ,
round(avg(oh.OrderNumber)) as AvgNumofOrders
from
OrderHeader as oh ,
OrderLine as ol
where
oh.OrderNumber=ol.OrderHeader_OrderNumber
group by
Season
order by
AvgNumofOrders;
```

	Season	AvgNumofOrders
►	Other	4981
	Holidays	5444
	Summer	5538

3. Is our Ecommerce DB design 1NF , 2NF and 3NF compliant ?

If yes , Why ? If No, why not?

**3nF since There are no transitive dependencies (That is every non primary key is dependent directly on the primary key.**