```
# Blockchain Asset Management System
import org.hyperledger.fabric.gateway.*;
import org.hyperledger.fabric.sdk.*;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.concurrent.TimeUnit;
public class AssetManagement {
  private final Gateway gateway;
  private final Network network;
  public AssetManagement() throws Exception {
    Path walletPath = Paths.get("wallet"):
    Wallet wallet = Wallets.newFileSystemWallet(walletPath);
    gateway = Gateway.createBuilder()
         .identity(wallet, "user1")
         .networkConfig(Paths.get("connection.yaml"))
         .connect();
    network = gateway.getNetwork("mychannel");
  public void createAsset(String dealerId, String msisdn, String mpin, double balance, String status, double
transAmount, String transType, String remarks) throws Exception {
    Contract contract = network.getContract("assetContract");
    contract.submitTransaction("createAsset", dealerId, msisdn, mpin, String.valueOf(balance), status,
String.valueOf(transAmount), transType, remarks);
  }
  public void updateAssetValue(String dealerId, double newBalance) throws Exception {
    Contract contract = network.getContract("assetContract");
    contract.submitTransaction("updateAssetValue", dealerId, String.valueOf(newBalance));
  public String queryAsset(String dealerId) throws Exception {
    Contract contract = network.getContract("assetContract");
    byte[] result = contract.evaluateTransaction("queryAsset", dealerId);
    return new String(result);
  public String getTransactionHistory(String dealerId) throws Exception {
    Contract contract = network.getContract("assetContract");
    byte[] result = contract.evaluateTransaction("getTransactionHistory", dealerId);
    return new String(result);
  public void close() {
    gateway.close();
```

public static void main(String[] args) {

assetManagement.close();

AssetManagement assetManagement = new AssetManagement();

System.out.println(assetManagement.getTransactionHistory("D123"));

System.out.println(assetManagement.queryAsset("D123")); assetManagement.updateAssetValue("D123", 1200.0);

assetManagement.createAsset("D123", "1234567890", "1234", 1000.0, "ACTIVE", 100.0, "CREDIT",

try {

"Initial Deposit");

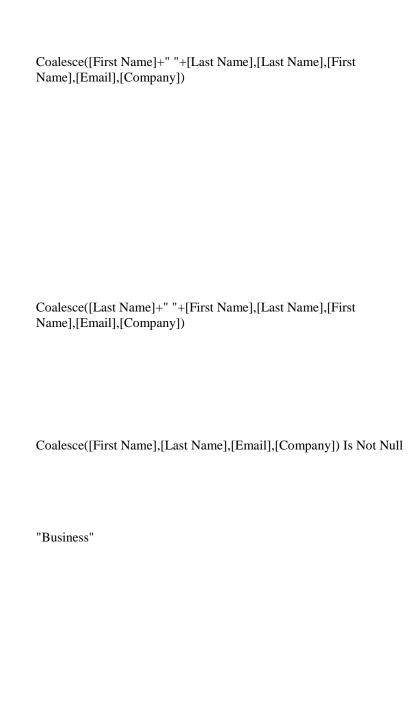
```
} catch (Exception e) {
            e.printStackTrace();
        }
}
```

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company]) Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null

"Business"

[End Time]>[Start Time]

0





"Good"

0

"Good"

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])
Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null
"Business"

[End Time]>[Start Time]

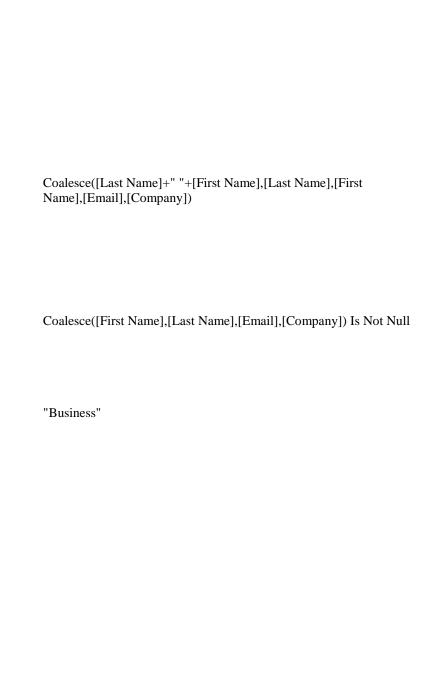
Today()

"Good"

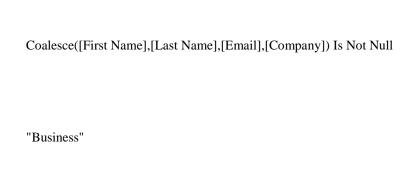
0

No





Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])



[Subtotal]+[Tax]

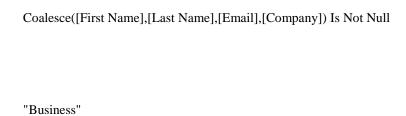
0

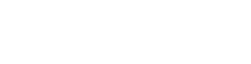
0

No

[End Date]>[Start Date]

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])





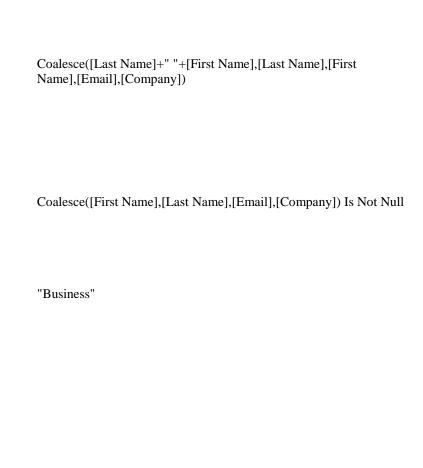


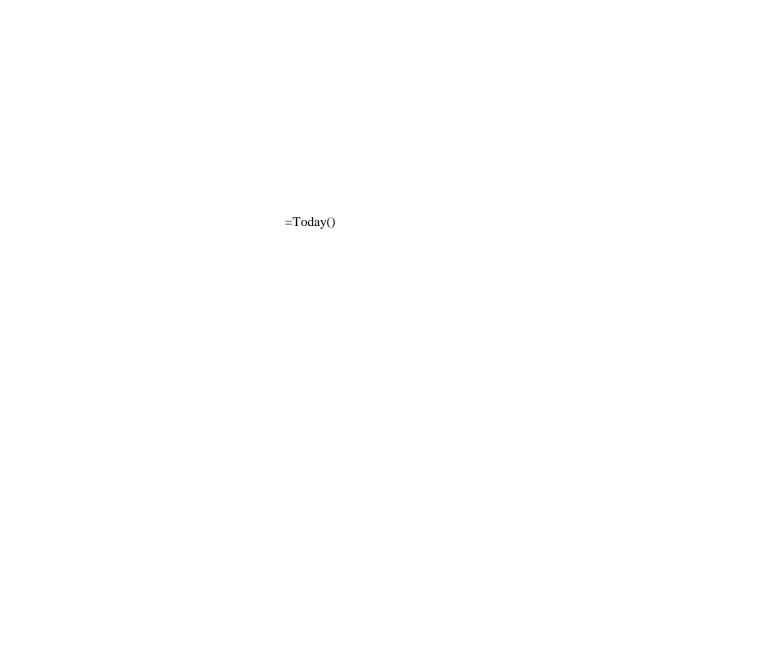
"Business"



"Business"

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])

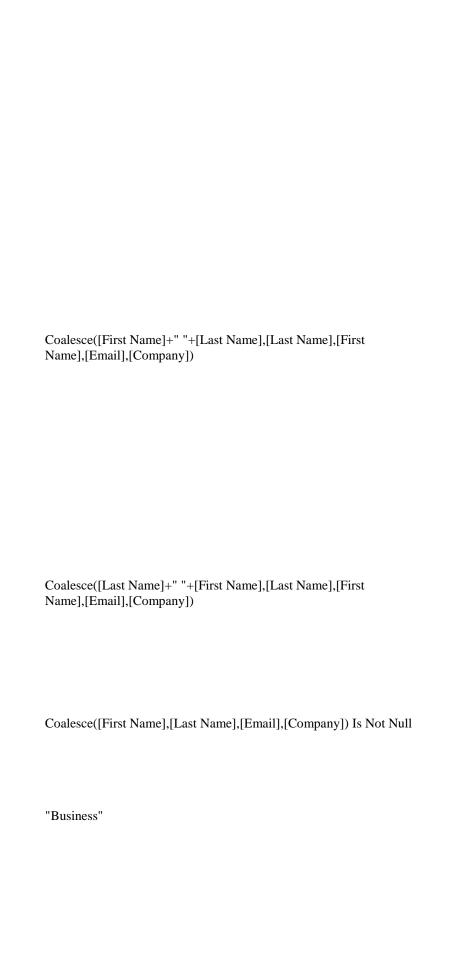




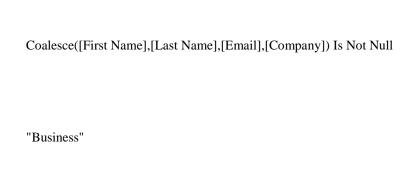
[Delivery Date]>=Today()

No

"Not Started"



Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])



Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])
Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null
"Full-time"

[Unit Price]*[Quantity]*(1-[Discount])

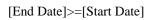
0

0

0

"None"





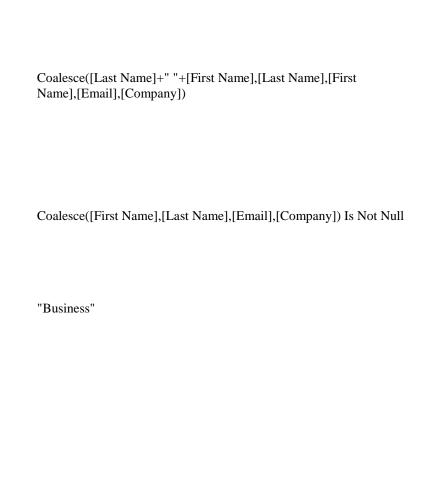
"Not Submitted"

=Today()

No



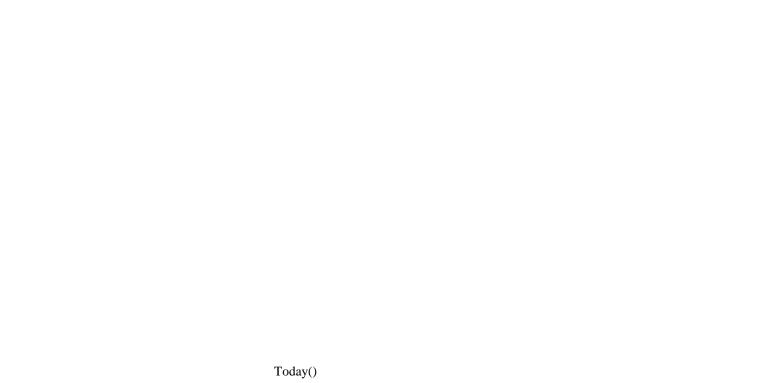
"Business"



[Subtotal]+[Tax]+[Shipping]



[Completed Previously]+[Completed This Period]
([Completed Previously]+[Completed This Period])*0.05
([Completed Previously]+[Completed This Period])-(([Completed Previously]+[Completed This Period])*0.05)+[Tax]
(([Completed Previously]+[Completed This Period])-(([Completed Previously]+[Completed This Period])*0.05)+[Tax])-[Previous Payments]
0
0
0



"1 - New"

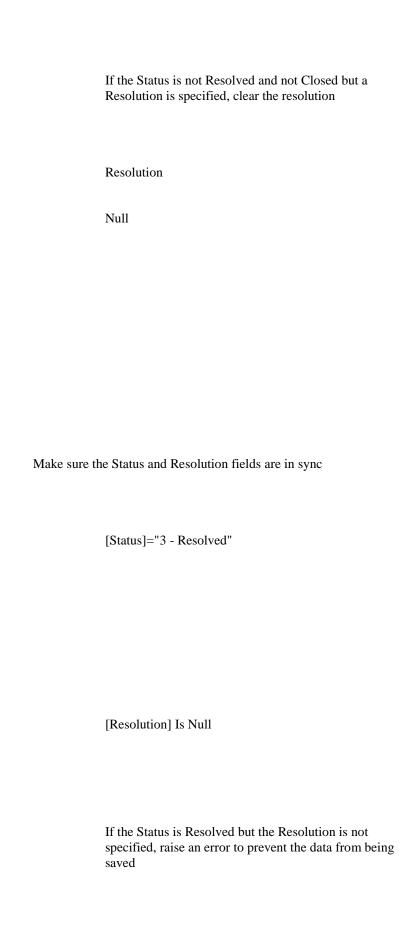
"1 - Critical"

=Today()

Make sure the Status and Resolution fields are in sync

[Status]="3 - Resolved"

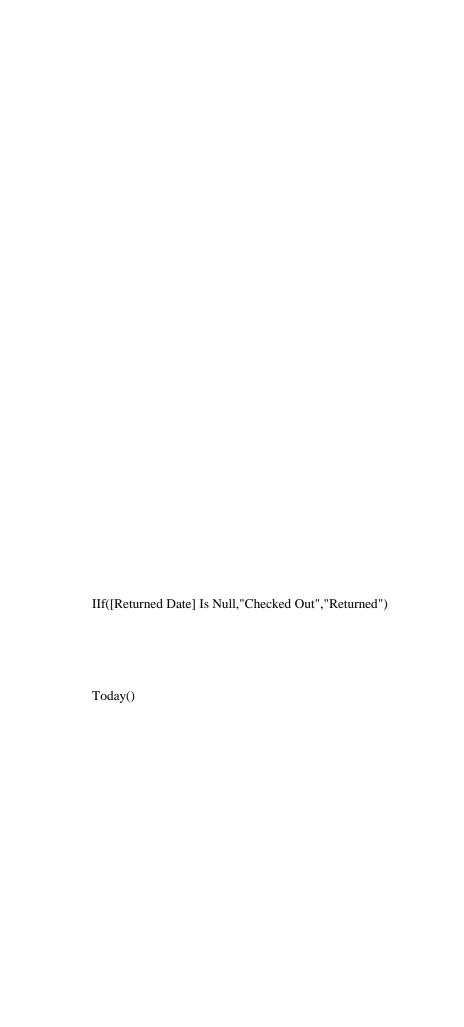
[Resolution] Is Null
If the Status is Resolved but the Resolution is not specified, raise an error to prevent the data from being saved You must select a resolution.
[Status]="4 - Closed"
[Resolution] Is Null
If the Status is Closed but the Resolution is not specified, raise an error to prevent the data from being saved An issue must be resolved before it can be closed.
[Resolution] Is Not Null



You must select a resolution.
[Status]="4 - Closed"
[Resolution] Is Null
If the Status is Closed but the Resolution is not specified, raise an error to prevent the data from being saved An issue must be resolved before it can be closed.
[Resolution] Is Not Null
If the Status is not Resolved and not Closed but a Resolution is specified, clear the resolution
Resolution

"Good"

IIf([Returned Date] Is Null,"Checked Out","Returned")
Today()





[End Time]>[Start Time]

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])

Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])	
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null	
"Business"	



No

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])
Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null
"Business"

[Unit Price]*[Quantity]*(1-[Discount])

0

0

0

"None"

IIf([Status]="Completed",No,Yes)

=Today()

"New"

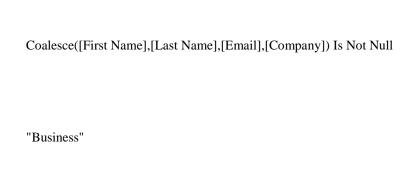
Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])
Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null
"Business"

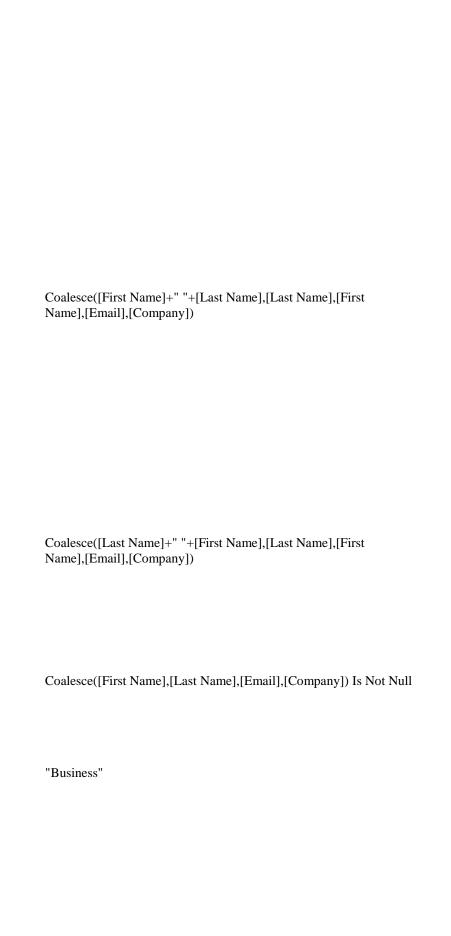
1

No



Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])





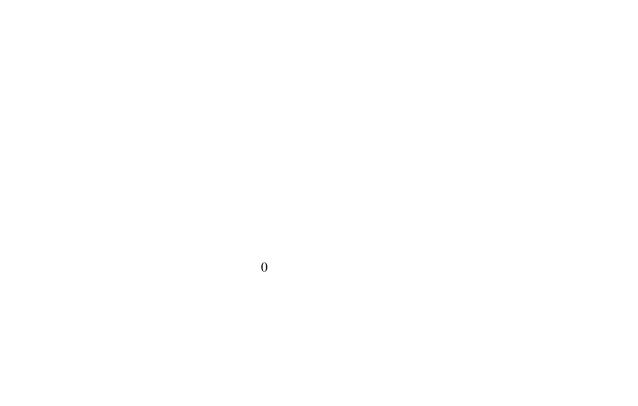


"Open"

No



[End Date]>=[Sta	art Date]
"2 - Medium"	
"Not Started"	
Now()	
	Not Update([Changed Date])
	Changed Date
	Now()



=Today()

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])

Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])
Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null
"Business"

[Quantity]*[Unit Price]

[Unit Price]*[Quantity]*(1-[Discount])

0

0

0

"None"

IIf([Status]="Completed",No,Yes)

=Today()

"New"



DateDiff(MONTH,[Start Date],[End Date])*[Rental Rate]

[End Date]>=[Start Date]







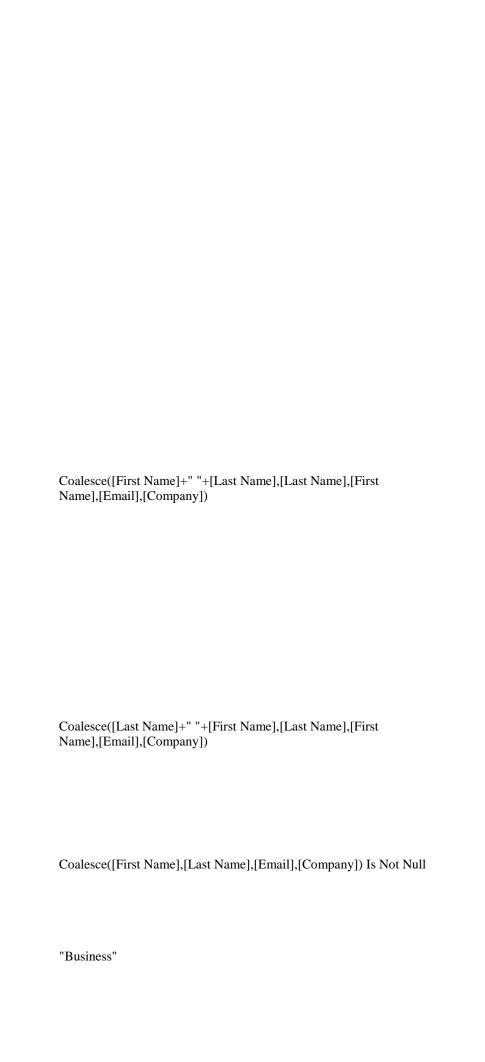
Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company]) Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null

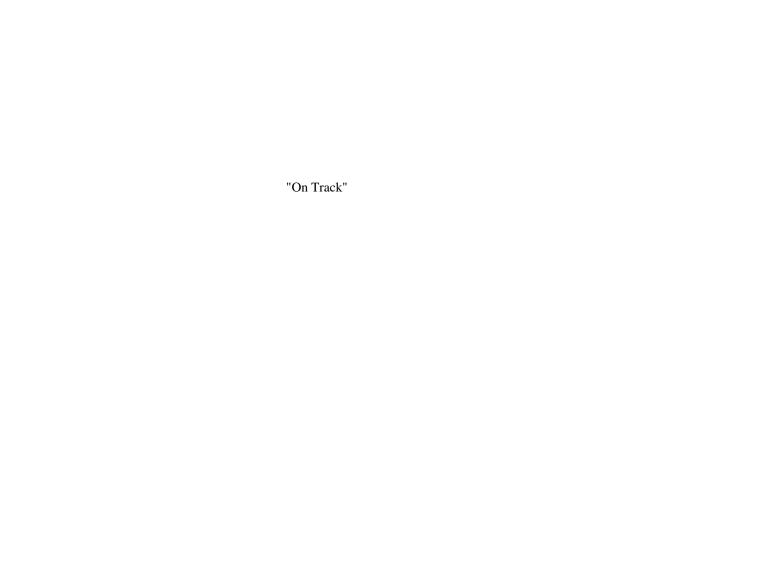
"Business"

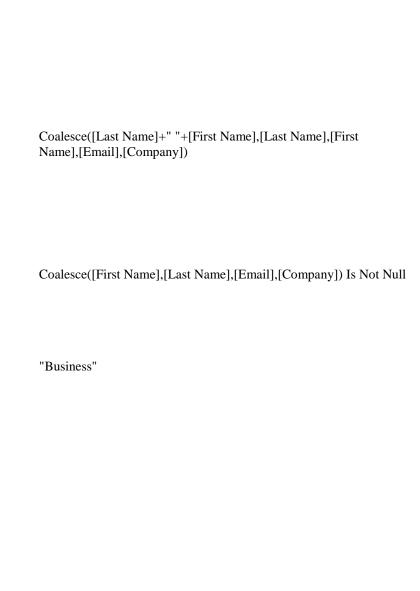
0

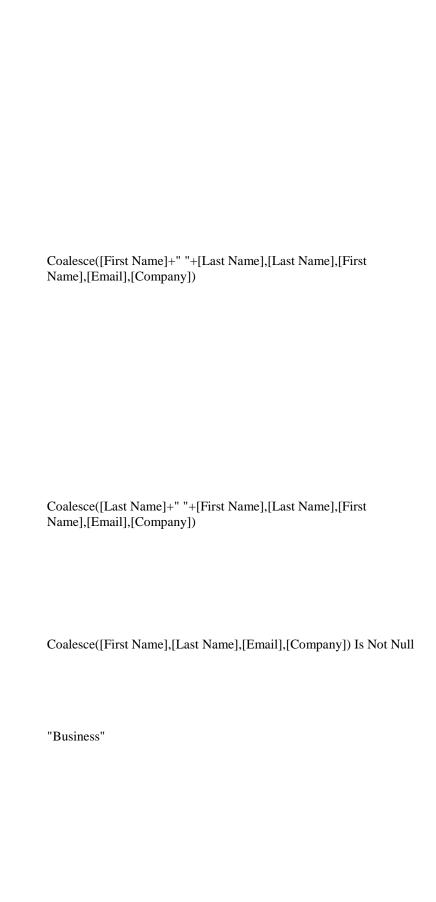
No











Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company]) Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null

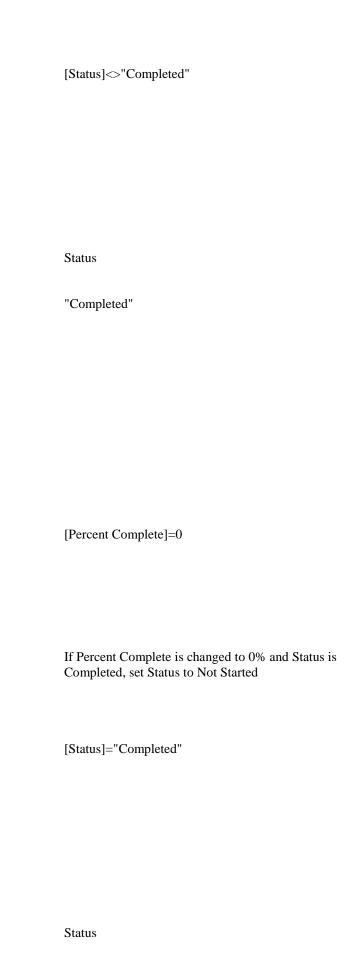
"Business"



[Percent Complete] Between 0 And 1
"2 - Medium"
0
"Not Started"
This data macro makes sure the Status is set correctly if the Percent Complete is updated or it makes sure the Percent Complete is set correctly if the Status is updated. Percent Complete: 0=0%, 1=100%
[Percent Complete]=0
Percent Complete is default - check Status
[Status]="Completed"
If Status is changed to Completed set Percent Complete to 100%

Percent Complete
1
[Percent Complete]=1
If Percent Complete is 100% set Status to Completed
[Status]
"Completed"
[Status]="Completed" Or [Status]="Not Started"

	If Percent Complete is between 0% and 100% and the Status is either Completed or Not Started, set Status to In Progress
	Status
	"In Progress"
This data mad	cro makes sure the Status is set correctly if the Percent
Complete is u correctly if th	apdated or it makes sure the Percent Complete is set the Status is updated. plete: 0=0%, 1=100%
	Update([Percent Complete])
	[Percent Complete]=1
	If Percent Complete is changed to 100% and Status is not set to Completed, set Status to Completed



"Not Started"
[Status]="Completed" Or [Status]="Not Started"
If Percent Complete is between 0% and 100% and the Status is either Completed or Not Started, set Status to In Progress
Status
"In Progress"
Update([Status])

[Status]="Completed"
If Status is changed to Completed and Percent Complete is not 100%, set Percent Complete to 100%
[Percent Complete]<>1
Percent Complete
1
[Status]="Not Started"

If Status is changed to Not Started and Percent Complete is not 0%, set Percent Complete to 0%
[Percent Complete]<>0
Percent Complete
0
[Percent Complete]=1
If Status is changed to something other than Completed and the Percent Complete is 100%, set Percent Complete to 0%
Percent Complete
0

IIf([Status] In ("Completed", "Deferred"), No, Yes)

[Percent Complete] Between 0 And 1

"2 - Medium"

"Not Started"	
Complete is correctly if t	acro makes sure the Status is set correctly if the Percent updated or it makes sure the Percent Complete is set the Status is updated. Inplete: 0=0%, 1=100%
	Update([Percent Complete])
	[Percent Complete]=1
	If Percent Complete is changed to 100% and Status is not set to Completed, set Status to Completed
	[Status]<>"Completed"

Status

"Completed"
[Percent Complete]=0
If Percent Complete is changed to 0% and Status is Completed, set Status to Not Started
[Status]="Completed"
[Salas] Completed
Status "Not Started"

[Status]="Completed" Or [Status]="Not Started"
If Percent Complete is between 0% and 100% and the Status is either Completed or Not Started, set Status to In Progress
Status
"In Progress"
Update([Status])
[Status]="Completed"

not 10	us is changed to Completed and Percent Complete 0%, set Percent Complete to 100%
[Perce	nt Complete]<>1
Percer	nt Complete
1	
[Status	s]="Not Started"
If Stat	us is changed to Not Started and Percent Complet 0%, set Percent Complete to 0%
[Perce	nt Complete]<>0

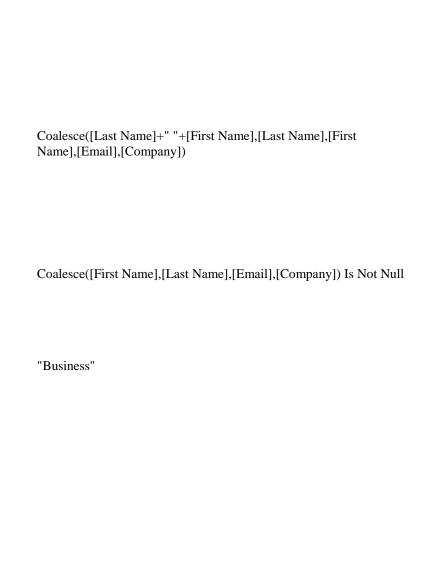
0
[Percent Complete]=1
If Status is changed to something other than Completed and the Percent Complete is 100%, set Percent Complete to 0%
Percent Complete
0

Percent Complete

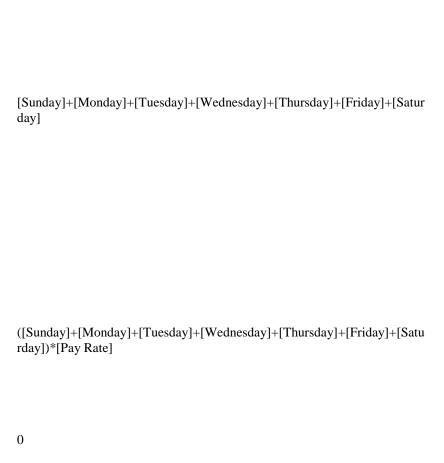
Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company]) Coalesce([Last Name]+" "+[First Name],[Last Name],[First Name],[Email],[Company])

Coalesce([First Name],[Last Name],[Email],[Company]) Is Not Null

"Business"



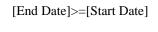
=Today()





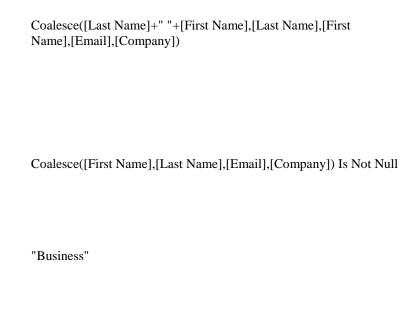






"Pleasure"

Coalesce([First Name]+" "+[Last Name],[Last Name],[First Name],[Email],[Company])



Today()

"Best Way"