



**Subject :** Big Data Analytics  
**Semester :** 7  
**ID :** 20CEUOS101  
**Roll No :** CE097  
**Name :** Patel Meetkumar Ashvinkumar  
**Lab :** 9

**Aim :** Delivering Reports including visualization and customization properties.

## **Excercise :**

**1. Using SQLdeveloper create a report which will display university data.**

Reports using SQLdeveloper :

## **Creating tables :**

```
create table client_master  
(client_no varchar2(6),  
name varchar2(20),  
address1 varchar2(30),  
address2 varchar2(30),  
city varchar2(15),  
state varchar2(15),  
pincode number(6),  
bal_due number(10,2));
```

```

create table salesman_master
(salesman_no varchar2(6) primary key check (salesman_no like '5%'),
sal_name varchar2(20) not null,
address varchar2(50) not null,
city varchar2(20),
state varchar2(20),
pincode number(6),
sal_amt number(8,2) not null check(sal_amt <> 0),
tgt_to_get number(6,2) not null check(tgt_to_get <> 0),
ytd_sales number(6,2) not null check(ytd_sales <> 0),
remarks varchar2(30));

```

```

create table product_master
(product_no varchar2(20),
description varchar2(20),
profit_percent number,
unit_measure varchar2(20),
qty_on_hand number,
reorder_lvl number,
sell_price number,
cost_price number);

```

```

create table sales_order
(s_order_no varchar2(6) primary key check(s_order_no like '0%'),
s_order_date date,
client_no varchar2(25) references client_master(client_no),
dely_add varchar2(6),
salesman_no varchar2(6) references salesman_master(salesman_no),
dely_type char(1) default 'f' check (dely_type in ('p','f')),
billed_yn char(1),
dely_date date,
order_status varchar2(25) check (order_status in ('inprocess','fullfilled','backorder','cancelled')),
check (dely_date >= s_order_date)
);

```

```

create table sales_order_details
(s_order_no varchar2(6) references sales_order(s_order_no),
product_no varchar2(6) references product_master(product_no),
qty_order number(8),
qty_disp number(8),
product_rate number(10,2),
primary key(s_order_no, product_no)
);

```

### Table Data :

	CLIENT_NO	NAME	ADDRESS1	ADDRESS2	CITY	STATE	PINCODE	BAL_DUE
1	0006	Rukmini	(null)	(null)	Bombay	Maharashtra	400050	0
2	0002	Vandana	(null)	(null)	Madras	Tamilnadu	780001	0
3	0003	Pramada	(null)	(null)	Bombay	Maharashtra	400057	5000
4	0004	Basu	(null)	(null)	Bombay	Maharashtra	400056	0
5	0005	Ravi	(null)	(null)	Delhi	Gujarat	100001	2000
6	0001	Ivan	(null)	(null)	Bombay	Maharashtra	400054	15000

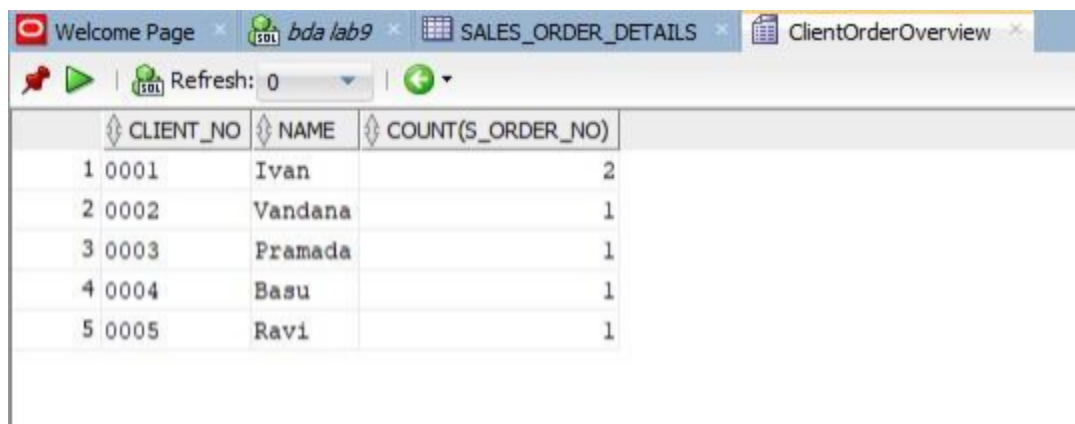
	PRODUCT_NO	DESCRIPTION	PROFIT_PERCENT	UNIT_MEASURE	QTY_ON_HAND	REORDER_LVL	SELL_PRICE	COST_PRICE
1	P00001	1.44floppies		5 piece	100	20	525	500
2	P03453	Monitors		6 piece	10	3	12000	11200
3	P06734	Mouse		5 piece	20	5	1050	500
4	P07865	1.22floppies		5 piece	100	20	525	500
5	P07868	Keyboards		2 piece	10	3	3150	3050
6	P07885	CD Drive		2.5 piece	10	3	5250	5100
7	P07965	540 HDD		4 piece	10	3	8400	8000
8	P07975	1.44 Drive		5 piece	10	3	1050	1000
9	P08865	1.22 Drive		5 piece	2	3	1050	1000

	SALESMAN_NO	SAL_NAME	ADDRESS	CITY	STATE	PINCODE	SAL_AMT	TGT_TO_GET	YTD_SALES	REMARKS
1	500001	Kiran	A/14 worli	Bombay	Maharastra	400002	3000	100	50	Good
2	500002	Manish	65, nariman	Bombay	Maharastra	400001	3000	200	100	Good
3	500003	Ravi	P-7 Bandra'	Bombay	Maharastra	400032	3000	200	100	Good
4	500004	Ashish	A/5 Juhu	Bombay	Maharastra	400044	3500	200	150	Good

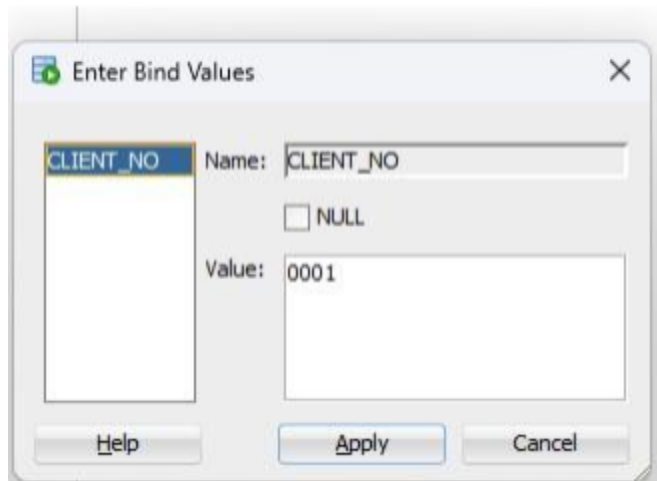
	S_ORDER_NO	S_ORDER_DATE	CLIENT_NO	DELY_ADD	SALESMAN_NO	DELY_TYPE	BILLED_YN	DELY_DATE	ORDER_STATUS
1	019001	12-01-96	0001	(null)	500001	f	N	20-01-96	backorder
2	019002	25-01-96	0002	(null)	500002	p	N	27-01-96	fullfilled
3	016865	18-02-96	0003	(null)	500003	f	Y	20-02-96	fullfilled
4	019003	03-04-96	0001	(null)	500001	f	Y	07-04-96	fullfilled
5	046866	20-05-96	0004	(null)	500004	p	N	22-05-96	cancelled
6	010008	24-05-96	0005	(null)	500004	f	N	26-05-96	backorder

	S_ORDER_NO	PRODUCT_NO	QTY_ORDER	QTY_DISP	PRODUCT_RATE
1	019001	P00001	4	4	525
2	019001	P07965	2	1	8400
3	019001	P07885	2	1	5250
4	019002	P00001	10	0	525
5	019003	P00001	4	4	1050
6	019003	P03453	2	2	1050
7	046866	P06734	1	1	12000
8	046866	P07965	1	0	8400
9	010008	P07975	1	0	1050
10	010008	P00001	10	5	525

## Generating user defined reports :



CLIENT_NO	NAME	COUNT(S_ORDER_NO)
1 0001	Ivan	2
2 0002	Vandana	1
3 0003	Pramada	1
4 0004	Basu	1
5 0005	Ravi	1



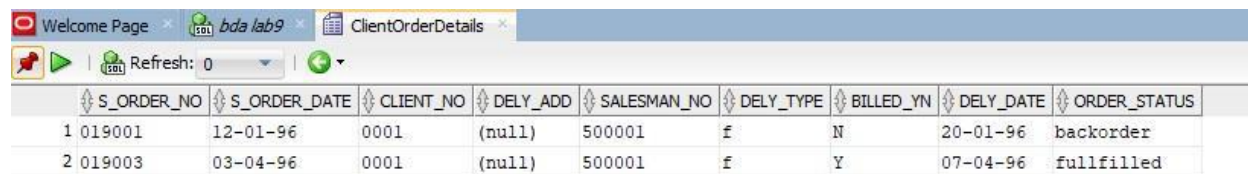
Enter Bind Values

CLIENT\_NO Name: CLIENT\_NO

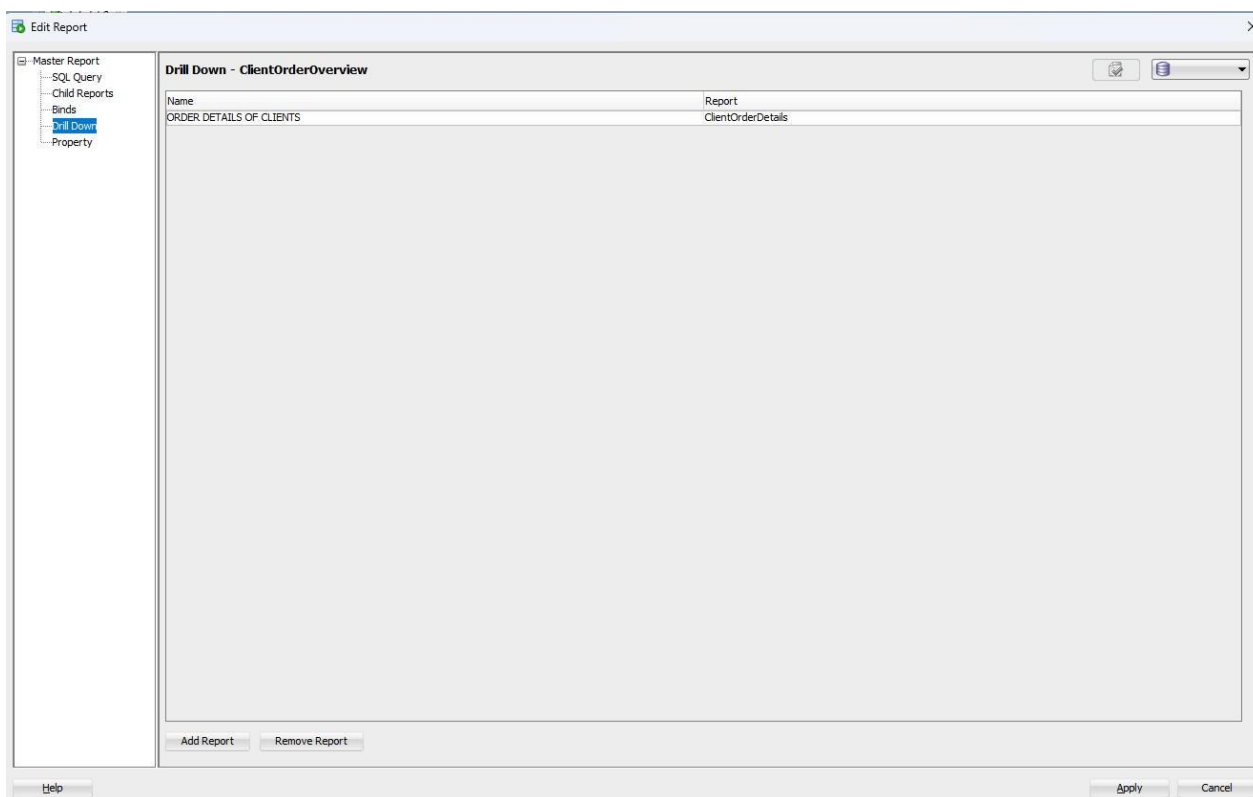
☐ NULL

Value: 0001

Help Apply Cancel



S_ORDER_NO	S_ORDER_DATE	CLIENT_NO	DELY_ADD	SALESMAN_NO	DELY_TYPE	BILLED_YN	DELY_DATE	ORDER_STATUS
1 019001	12-01-96	0001	(null)	500001	f	N	20-01-96	backorder
2 019003	03-04-96	0001	(null)	500001	f	Y	07-04-96	fullfilled

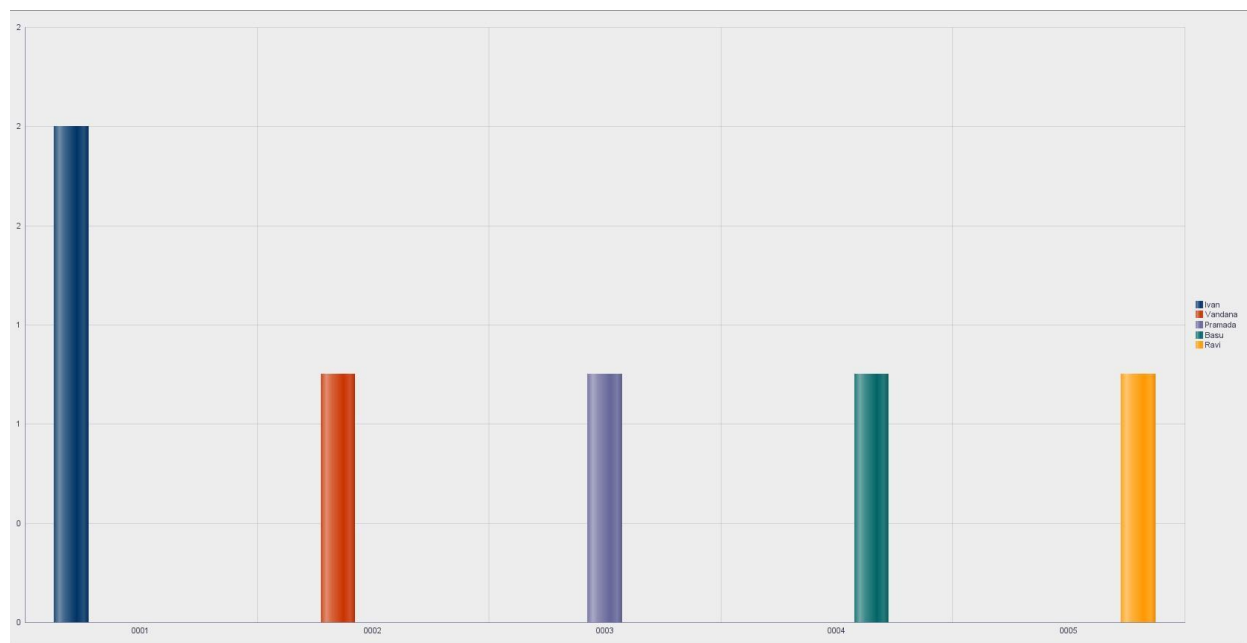


## Drill Down using Sub Reports :

	CLIENT_NO	NAME	COUNT(S_ORDER_NO)	
1	0001	Ivan	2	
2	00	ORDER DETAILS OF CLIENTS		1
3	00			1
4	00			1
5	00			1

S_ORDER_NO	S_ORDER_DATE	CLIENT_NO	DELY_ADD	SALESMAN_NO	DELY_TYPE	BILLED_YN	DELY_DATE	ORDER_STATUS
1 019001	12-01-96	0001	(null)	500001	f	N	20-01-96	backorder
2 019003	03-04-96	0001	(null)	500001	f	Y	07-04-96	fullfilled

## Bar Graph Report :



**2.Using Jaspersoft , generate a report from mongodb database collections. Use aggregate queries of mongodb to generate the report.**

**Report using Sample Data :**



# Wood Title

## Wood SubTitle

ID	NAME	COST
0	Iron Iron	5.400000000000000000000000
1	Chair Shoe	24.800000000000000000000000
2	Telephone Clock	24.800000000000000000000000
3	Chair Chair	25.400000000000000000000000
4	Ice Tea Shoe	12.800000000000000000000000
5	Clock Clock	23.600000000000000000000000
6	Ice Tea Chair	9.800000000000000000000000
7	Telephone Shoe	8.400000000000000000000000
8	Ice Tea Clock	22.600000000000000000000000
9	Clock Telephone	17.200000000000000000000000
10	Telephone Ice Tea	20.400000000000000000000000
11	Telephone Iron	8.800000000000000000000000
12	Clock Ice Tea	16.800000000000000000000000
13	Telephone Clock	18.000000000000000000000000
14	Telephone Iron	12.400000000000000000000000
15	Ice Tea Chair	9.400000000000000000000000
16	Ice Tea Shoe	19.400000000000000000000000
17	Clock Ice Tea	22.000000000000000000000000
18	Chair Clock	17.200000000000000000000000
19	Ice Tea Ice Tea	11.000000000000000000000000
20	Ice Tea Telephone	20.000000000000000000000000
21	Chair Chair	11.400000000000000000000000
22	Iron Iron	6.600000000000000000000000
23	Shoe Chair	7.600000000000000000000000
24	Chair Shoe	7.200000000000000000000000
25	Shoe Shoe	16.200000000000000000000000
26	Shoe Shoe	25.200000000000000000000000
27	Telephone Iron	23.000000000000000000000000
28	Clock Iron	3.000000000000000000000000
29	Chair Telephone	11.200000000000000000000000
30	Shoe Iron	23.200000000000000000000000
31	Ice Tea Telephone	4.800000000000000000000000
32	Clock Iron	19.000000000000000000000000
33	Iron Chair	18.200000000000000000000000
34	Chair Iron	25.600000000000000000000000
35	Telephone Shoe	7.600000000000000000000000
36	Ice Tea Iron	3.200000000000000000000000
37	Clock Shoe	9.400000000000000000000000
38	Clock Ice Tea	21.600000000000000000000000






## Generating Report for Source Data.csv file:

- Loading the data into mongoDB compass

### Student.StudentMaster

Documents Aggregations Schema Explain Plan Indexes Validation

Filter  Type a query: { field: 'value' }

 ADD DATA  EXPORT COLLECTION

```

_id: ObjectId('65080a8c57fadafb59f9157d')
Candidate Id: "C0001"
Employee Id: "E0001"
First Name: "Supriyo"
DegreePercentage: 74.4
12th/DiplomaPercentage: 75
SSCPercentage: 79
University Name: "VTU "
Native State: "Madhya Pradesh"
Background(CS\NCS): "CS"
Industrial Training: "Y"
TrainingExam1Percentage: 86
Exam1Grade: "A"
TrainingExam2Percentage: 81
Exam2Grade: "A"
IntoProduction: 1

```

```

_id: ObjectId('65080a8c57fadafb59f9157e')
Candidate Id: "C0002"
Employee Id: "E0002"
First Name: "Shailendra"
Middle Name: "Kumar"
DegreePercentage: 72.55
12th/DiplomaPercentage: 75.77
SSCPercentage: 80.1
University Name: "RGPRV"
Native State: "Madhya Pradesh"
Background(CS\NCS): "CS"
Industrial Training: "Y"
TrainingExam1Percentage: 78
Exam1Grade: "B"
TrainingExam2Percentage: 0
Exam2Grade: "C"
IntoProduction: 0

```

## Creating a new Data Adapter :


**Data Adapter**  
MongoDB Connection

Name:

Mongo URI

Username

Password



**New Report Wizard**

**Data Source**  
Select a Data Source and design the query.

```
{
  'collectionName': 'studentData',
  'findQuery': {
    'TrainingExam1Percentage': {'$ne': ''},
    'TrainingExam2Percentage': {'$ne': ''},
  }
}
```

**Query used :**

```
{
  'collectionName':'studentData',
  'findQuery' : {
    'TrainingExam1Percentage':{'$ne':''},
    'TrainingExam2Percentage':{'$ne':''},
  }
}
```

**Selecting Fields to be displayed in the report :**


**New Report Wizard**

**Fields**  
Please select dataset fields

Dataset Fields	Fields
<input type="checkbox"/> 12th/DiplomaPercentage	
<input type="checkbox"/> Background(CS\NCS)	
<input type="checkbox"/> Candidate Id	
<input type="checkbox"/> DegreePercentage	
<input type="checkbox"/> Employee Id	
<input type="checkbox"/> Exam1Grade	
<input type="checkbox"/> Exam2Grade	
<input checked="" type="checkbox"/> First Name	
<input type="checkbox"/> Industrial Training	
<input type="checkbox"/> IntoProduction	
<input type="checkbox"/> Middle Name	
<input type="checkbox"/> Native State	
<input type="checkbox"/> SSCPercentage	
<input type="checkbox"/> TrainingExam1Percentage	

Navigation buttons: < Back, Next >, Cancel, Finish


## Report Generated :



# Coffee

## Coffee SubTitle

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce auctor purus gravida arcu aliquam mattis. Donec et nulla libero, ut varius massa. Nulla sed turpis elit. Etiam aliquet mauris a ligula hendrerit in auctor leo lobortis.



Background	First Name	Last Name	Middle Name	TrainingExa
ADU				
CS	Ruben	Chaudhari	Gershone	85
NCS	Bhanu	Kumar	Tanuricha	79
NCS	Piancy	Menon		72
NCS	Thomas	Negi		69
NCS	Chikku	Kumar	Kuruvilla	72
NCS	Maria	Maram	Christophany	73
NCS	Sowkoor	Nalam	Nischal	73
NCS	Janie	Madugula	Manoharan	71
ALMU				
NCS	Chetan	Kanakamma	Kumar	68
ANG College				
NCS	Rizwan	Muddalakkaiah	Ahmed	69
NCS	Mithilesh	Matharu	Krishna	71
NCS	Swetha	Nayak		72
NCS	Bharadwaj	Kumar		72
NCS	Aswani	Kumar		74
NCS	Silpa	Nair		74
NCS	Vidhyun	P	Latha	75
NCS	Durga Naga	Lakhani		76
	Shyam			
NCS	Padmini	Menon		76
NCS	Bhavya	Kumar		76
ANU				
NCS	Selvam	D Sa		77
NCS	Kalaivani	Dcruz		77
NCS	Anju	Deol		77
NCS	Vijaya	Desai	Lakshmi	77
CS	Anil	Dhawan		77
CS	Ranjit	Dhillon	Singh	77
CS	Mayur	Dhiman		77