

### **Reporting Engineer**

Summarizing "Promo Effectiveness Review" Program pada Omnichannel Jubelio (with PostgreSQL & Ms. Excel)

Presented by Bagus Raditya Niarto





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# Case Study

Setiap 6 Bulan sekali (Akhir Semester) Omnichannel Jubelio mengadakan Promo Effectiveness Review, untuk melihat efektivitas dari PROMO CODE terhadap total penjualan dari salah satu marketplace. Lakukan Task berikut:

- 1. Mengaplikasikan Promo Code dari Tim Budgeting
- 2. Membuat Tabel Laporan Khusus Quartal ke 3 dan 4
- 3. Melakukan Summary dan Visualisasi dari Hasil Data Tabel Quartal ke 3 dan 4
- 4. Membuat Shipping Label Khusus Bulan Desember

# Prasyarat



1. File → Preferences → Paths → Binary paths → PostgreSQL Binary Path



2. Membuat Database dengan nama 'Task5\_DB' lalu Restore file 'Task5\_DB'





# TASK 1

Mengaplikasikan Promo Code dari Tim Budgeting

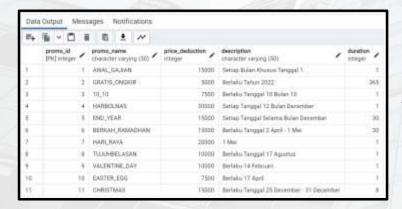


1. Membuat Tabel 'promo\_code'

```
CREATE TABLE promo_code (
promo_id SERIAL,
promo_name VARCHAR(100),
price_deduction BIGINT,
description VARCHAR(200),
duration INT,
PRIMARY KEY (promo_id));
```

2. Importing File 'promo\_code.csv'

```
COPY promo_code(promo_id, promo_name, price_deduction, Description, Duration)
FROM 'C:\Users\Downloads\promo_code.csv'
DELIMITER ','
CSV HEADER;
```



← Tampilan Tabel 'promo\_code'



# TASK 2

Membuat Tabel Laporan Khusus Quartal ke 3 dan 4 (Bulan Juli – Desember 2022)

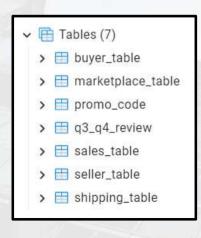


1. Membuat Tabel 'Q3\_Q4\_Review'

```
Query Query History Messages Notifications

1 CREATE TABLE Q3_Q4_Review (
2 purchase_date DATE,
3 total_price INT,
4 promo_code CHAR(30),
5 sales_after_promo INT
6 );
```

2. Identifikasi Tabel-tabel pada Database 'Task5\_DB'

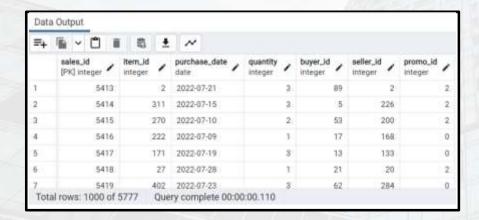


← Tujuh Tabel pada Database 'Task5\_DB'



3. Mengambil Data Transaksi Sales pada Tabel 'sales\_table' Bulan 1 Juli 2022 - 31 Desember 2022

SELECT \* FROM sales\_table WHERE purchase\_date BETWEEN '2022-07-01' AND '2022-12-31';



← Tampilan Tabel 'sales\_table' Periode 1 Juli 2022 – 31 Desember 2022



4. Menampilkan Data pada Tabel 'marketplace\_table'

SELECT \* FROM marketplace\_table;



← Tampilan Tabel 'marketplace\_table'



5. Menggabungkan Tabel 'sales\_table' dan 'marketplace\_table' pada Bulan 1 Juli 2022 - 31 Desember 2022

SELECT \* FROM sales\_table INNER JOIN marketplace\_table USING(item\_id)
WHERE purchase\_date BETWEEN '2022-07-01' AND '2022-12-31'
ORDER BY purchase\_date ASC;

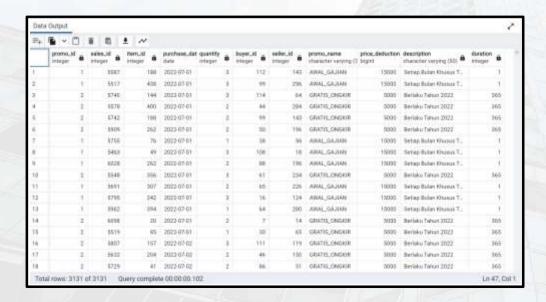
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2		144		5740	2022-07-01		3	114		54		Delt Laser Points	40000	Electronics	Laser Pointer	
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16		405		5570.	2022-07-01		2	-44		254	2	VENTOUN 2.5M	52000	Metrone	Obat Lahmpa	
7		186		5567	2022-07-01		3	112		143	1	BAPE NAVY CA.	4999000	Fastion Pris	Hoodie Pris	

 ← Tampilan Tabel Gabungan 'sales\_table' dan 'marketplace\_table' Periode 1 Juli 2022 - 31 Desember 2022



6. Menggabungkan Tabel 'sales\_table' dan 'promo\_code' pada Bulan 1 Juli 2022 - 31 Desember 2022

SELECT \* FROM sales\_table INNER JOIN promo\_code USING(promo\_id)
WHERE purchase\_date BETWEEN '2022-07-01' AND '2022-12-31'
ORDER BY purchase\_date ASC;



 ← Tampilan Tabel Gabungan 'sales\_table' dan 'promo\_code' Periode 1 Juli 2022 - 31 Desember 2022



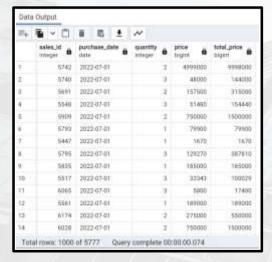
# TASK 3

Melakukan Summary dan Visualisasi dari Hasil Data Tabel Quartal ke 3 dan 4 (Bulan Juli – Desember 2022)



1. Membuat Kolom 'total\_price' yang terdiri dari Perkalian 'quantity' pada Tabel 'sales\_table' dengan 'price' pada Tabel 'marketplace\_table'

```
SELECT sales_table.sales_id, sales_table.purchase_date, sales_table.quantity, marketplace_table.price, (quantity*price) AS total_price
FROM sales_table
INNER JOIN marketplace_table ON sales_table.item_id=marketplace_table.item_id
WHERE purchase_date BETWEEN '2022-07-01' AND '2022-12-31'
ORDER BY purchase_date ASC;
```



← Tampilan Tabel 'sales\_table' dan 'marketplace\_table' dengan tambahan 'total\_price'

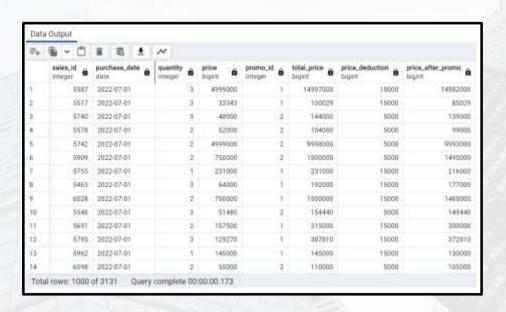


2. Membuat Kolom 'price\_after\_promo' yang terdiri dari Pengurangan 'total\_price' pada Perhitungan Langkah 1 Dikurangi 'price\_deduction' pada Tabel 'promo\_code' lalu Hasilnya Digabungkan dengan Langkah Pertama

```
SELECT sales_table.sales_id, sales_table.purchase_date, sales_table.quantity, marketplace_table.price, sales_table.promo_id, (quantity*price) AS total_price, promo_code.price_deduction, ((quantity*price)-promo_code.price_deduction) AS price_after_promo FROM ((sales_table INNER JOIN marketplace_table ON sales_table.item_id=marketplace_table.item_id) INNER JOIN promo_code ON sales_table.promo_id=promo_code.promo_id) WHERE purchase_date BETWEEN '2022-07-01' AND '2022-12-31' ORDER BY purchase_date ASC;
```



Tampilan Tabel 'sales\_table', 'marketplace\_table', dan 'promo\_code' → dengan Tambahan 'total\_price' dan 'price\_after\_promo'



3. Menyimpan Data dan Tabel Hasil Akhir pada Langkah Kedua dalam Format 'csv'



#### 4. Membuka dan Merapikan Data Hasil di Excel

-1	A	В	C	D	E	F	- 6	H	1	1
1	sales_id,"p	urchase_d	ate","quant	tity", "price	","promo_ic	f, total_p	rice","price	_deduction	","price_af	ter_promo'
2	5587,"2022	-07-01",3,	4999000,1,	14997000,	15000,1498	2000				
3	5517,*2022	-07-01",3,	33343,1,10	0029,1500	0,85029					
4	5740,*2022	-07-01",3,	48000,2,14	4000,5000	139000					
5	5578,"2022	-07-01",2,	52000,2,10	4000,5000	,99000					
6	5742,*2022	-07-01",2,	4999000,2,	9998000,5	000,999300	0				
7	5909, 2022	-07-01",2,	750000,2,1	500000,50	00,1495000	(				
8	5755,"2022	-07-01",3,	231000,1,2	31000,150	00,216000					
9	5463,"2022	-07-01",3,	64000,1,19	2000,1500	0,177000					
10	6028,"2022	-07-01",2,	,750000,1,1	500000,15	000,148500	10				
11	5548,*2022	-07-01",3,	51480,2,15	4440,5000	,149440					
12	5691,*2022	-07-01",2,	157500,1,3	15000,150	00,300000					
13	5795,"2022	-07-01",3,	129270,1,3	87810,150	00,372810					
14	5962,*2022	-07-01",1,	145000,1,1	45000,150	00,130000					
15	6098, 2022	-07-01",2,	55000,2,11	0000,5000	,105000					
16	5519,*2022	-07-01",1,	159000,2,1	59000,500	0,154000					
17	5807,"2022	-07-02",3,	140000,2,4	20000,500	0,415000					
18	5632, 2022	-07-02",2,	169000,2,3	38000,500	0,333000					
19	5729,*2022	-07-02",2,	23200,2,46	400,5000,4	1400					
20	5616,*2022	-07-02",2,	19500,2,39	000,5000,3	34000					
21	5966, 2022	-07-02",3,	62400,2,18	7200,5000	,182200					
22	5855,*2022	-07-02",1,	199000,2,1	99000,500	0,194000					
23	5586, 2022	-07-02",1,	69000,2,69	000,5000,6	54000					
24	5458,*2022	-07-02",3,	79900,2,23	9700,5000	,234700					
25	5816,*2022	-07-02",2	19000,2,38	000,5000,3	3000					
26	5507,*2022	-07-02",3,	9200,2,276	00,5000,22	600					
27	5689,*2022	-07-03",1,	1670,2,167	0,5000,-33	30.0					
28	5918, 2022	-07-03",2,	31000,2,62	000,5000,5	7000					
	6131, 2022		76000.2.22	8000.5000						

d	A	8		C	D	E	Ŧ	G	Н
1	sales id	purchase	date:	quantity	price:	promo_id	total_price	price_deduction	price_after_promo
2	5587	01/07/	2022	3	4999000	1	14997000	15000	14982000
3	5517	01/07/	2022	. 3	33343	1	100029	15000	85029
4	5740	01/07/	2022	3	48000	2	144000	5000	139000
5	5578	01/07/	2022	2	52000	2	104000	5000	99000
6	5742	01/07/	2022	2	4999000	- 2	9998000	5000	9993000
7	5909	01/07/	2022	- 2	750000	2	1500000	5000	1495000
8	5755	01/07/	2022	- 1	231000	- 1	231000	15000	216000
9	5463	01/07/	2022	3	64000	- 1	192000	15000	177000
10	6028	01/07/	2022	2	750000	1	1500000	15000	1485000
11	5548	01/07/	2022	. 3	51480	. 2	154440	5000	149440
12	5691	01/07/	2022	2	157500	1	315000	15000	300000
13	5795	01/07/	2022	3	129270	1	387810	15000	372810
14	5962	01/07/	2022	1	145000	1	145000	15000	130000
15	6098	01/07/	2022	2	55000	- 2	110000	5000	105000
16	5519	01/07/	2022	- 1	159000	2	159000	5000	154000
17	5807	02/07/	2022	3	140000	. 2	420000	5000	415000
18	5632	02/07/	2022	2	169000	2	338000	5000	333000
19	5729	02/07/	2022	2	23200	2	46400	5000	41400
20	5616	02/07/	2022	2	19500	2	39000	5000	34000
21	5966	02/07/	2022	3	62400	2	187200	5000	182200
22	5855	02/07/	2022	1	199000	2	199000	5000	194000
23	5586	02/07/	2022	1	69000	2	69000	5000	64000
24	5458	02/07/	2022	. 3	79900	2	239700	5000	234700
25	5816	02/07/	2022	2	19000	- 2	38000	5000	33000
26	5507	02/07/	2022	3	9200	2	27600	5000	22600
27	5689	03/07/	2022	1	1670	2	1670	5000	-3330
28	5918	03/07/	2022	2	31000	. 2	62000	5000	57000
29	6131	03/07/ Data Ta		(A)	76000	2	228000	5000	223000



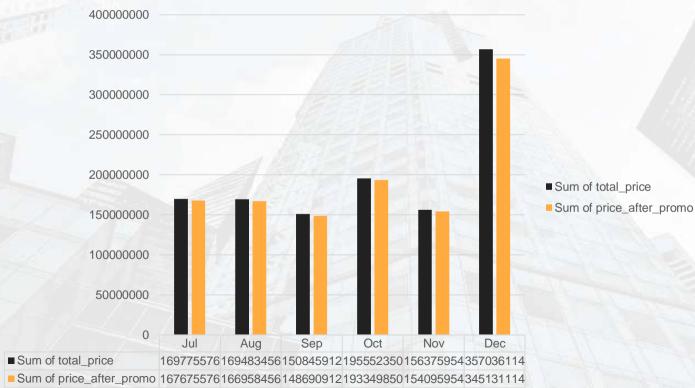
#### 5. Membuat Pivot Table

Row Labels 🔻	Sum of total_price	Sum of price_after_promo
⊞ Jul	169775576	167675576
⊕ Aug	169483456	166958456
<b>⊞ Sep</b>	150845912	148690912
⊕ Oct	195552350	193349850
<b>⊞ Nov</b>	156375954	154095954
⊕ Dec	357036114	345131114
Grand Total	1199069362	1175901862

← Tampilan Pivot Tabel yang Berisi Jumlah dari 'total\_price' dan 'price\_after\_promo' pada Bulan Juli -Desember



#### 6. Membuat Visualisasi Data dengan Clustered Column Chart





#### 7. Interpretasi Hasil Analisis

Terdapat perbedaan berupa pengurangan harga yang sebelumnya tanpa menggunakan promo dan setelah menggunakan promo. Dengan adanya promo berupa potongan harga atau gratis ongkos kirim dapat membuat:

- → Konsumen dapat membeli barang dengan harga yang lebih murah
- → Membantu konsumen menghemat biaya, sehingga mereka dapat membeli lebih banyak produk atau jasa dengan anggaran yang sama
- → Meningkatkan daya beli konsumen
- → Meningkatkan loyalitas konsumen
- → Menjaga daya saing dalam persaingan bisnis



# TASK 4

Membuat Shipping Label Khusus Bulan Desember



1. Membuat Tabel 'shipping\_summary'

```
CREATE TABLE shipping_summary(
shipping_id INT,
shipping_date DATE,
seller_name VARCHAR (255),
buyer_name VARCHAR (255),
buyer_address VARCHAR (50),
buyer_city VARCHAR (255),
buyer_zipcode BIGINT,
kode_resi BIGINI,
PRIMARY KEY (shipping_id));
```

2. Menggabungkan Tabel 'shipping\_table' dan 'seller\_table' pada Bulan Desember 2022

```
SELECT * FROM shipping_table INNER JOIN seller_table USING(seller_id)
WHERE purchase_date BETWEEN '2022-12-01' AND '2022-12-31'
ORDER BY purchase_date ASC;
```

Tampilan Tabel 'shipping\_table' dan 'seller\_table' pada Bulan Desember 2022





3. Menggabungkan Tabel 'shipping\_table' dan 'buyer\_table' pada Bulan Desember 2022

SELECT \* FROM shipping\_table INNER JOIN buyer\_table USING(buyer\_id)
WHERE purchase\_date BETWEEN '2022-12-01' AND '2022-12-31'
ORDER BY purchase\_date ASC;



← Tampilan Tabel 'shipping\_table' dan 'buyer\_table' pada Bulan Desember 2022



#### 4. Membuat Kolom 'kode\_resi' pada Tabel 'shipping\_summary'

```
SELECT shipping_table.shipping_id, shipping_table.shipping_date, seller_table.seller_name, buyer_table.city, buyer_table.zipcode, 
CONCAT (shipping_id,purchase_date,shipping_date,shipping_table.buyer_id,shipping_table.seller_id)
AS kode_resi FROM ((shipping_table
INNER JOIN seller_table ON shipping_table.seller_id=seller_table.seller_id)
INNER JOIN buyer_table ON shipping_table.buyer_id=buyer_table.buyer_id)
WHERE shipping_date BETWEEN '2022-12-01' AND '2022-12-31'
ORDER BY shipping_date ASC;
```



← Tampilan Tabel 'shipping\_summary'



- 5. Ekspor Data dan Tabel Hasil ke Excel dalam Format 'csv'
- 6. Membuka Data Tabel 'shipping\_summary' di Excel

A A	8	C	D	É
1 buyer_name	address	city	zipcode	kode_resi
2 Evi Wikarsa	JI Dewi Sartika 357 C	Jakarta Pusat	15415	92702022-11-302022-12-01103125
3 Eiffel Tedja	Jl Kwitang Raya 8 Ged Senatama	Jakarta Pusat	16366	94012022-11-282022-12-018914
4 Hioe Isenta	JI Pekayon 4	Jakarta Barat	16966	93892022-11-302022-12-01109172
5 Elvira Pudjiwati	JI Raya Pasar Minggu BI B/12	Jakarta Pusat	16563	90462022-11-292022-12-019574
6 Bob Yanuar	JI RS Fatmawati 15 Golden Plaza BI I/1-2	Jakarta Pusat	16250	93352022-11-302022-12-015277
7 Fabian Gelael	JI Prof Surya Sumantri 16	Kota Bandung	16319	91292022-11-292022-12-01108279
8 Effendy Husin	JI Ampera Raya Kav I/5 Ged Satmarindo Lt 2	Jakarta Pusat	16277	93532022-11-292022-12-0187305
9 Andre Sukendra Atmadja	JI Laksda M Nazir 11 U	Jakarta Selatan	16483	90472022-11-292022-12-012292
10. Bobby Andhika	Jl Panti Asuhan 2	Jakarta Pusat	15502	88262022-11-302022-12-0154302
11 Beng Phiau	JI Baskara Sari 92	Kota Pasuruan	17038	90512022-11-292022-12-0134226
12 Darmadi Karjanto Putro	JI Pinangsia III/15	Jakarta Pusat	17167	91052022-11-302022-12-0168255
13 Andi Achmad Dara	JI Surnagung III Kav Bulak K/5	Jakarta Utara	16681	90012022-11-292022-12-0114227
14 Ance Anggraeny	JI Garuda Dlm I 8I B/47	Kota Bandung	16576	91022022-11-292022-12-011184
15 Andi Achmad Dara	JI Sumagung III Kav Bulak K/5	Jakarta Utara	16681	96222022-11-302022-12-0114117
16 Execorp Limited	JI Raden Saleh Ruko Metro Permata BI A-2/33	Jakarta Pusat	15758	95992022-11-282022-12-01107178
17 Darwin Leo	JI Cikini Raya 8	Jakarta Pusat	16509	91642022-11-292022-12-0175246

7. Menghilangkan '-' pada Kolom 'kode\_resi' dengan Formula =SUBSTITUTE(\$E\$2:\$E\$1466;"-";"")





#### 8. Hasil Akhir dari Tabel 'shipping\_summary'

4	A	В	C	D	E
1	buyer_name	address	city	zipcode	kode_resi
2	Evi Wikarsa	Jl Dewi Sartika 357 C	Jakarta Pusat	15415	92702022113020221201103125
3	Eiffel Tedja	JI Kwitang Raya 8 Ged Senatama	Jakarta Pusat	16366	940120221128202212018914
4	Hioe Isenta	Jl Pekayon 4	Jakarta Barat	16966	93892022113020221201109172
5	Elvira Pudjiwati	JI Raya Pasar Minggu BI B/12	Jakarta Pusat	16563	904620221129202212019574
6	Bob Yanuar	JI RS Fatmawati 15 Golden Plaza BI I/1-2	Jakarta Pusat	16250	933520221130202212015277
7	Fabian Gelael	JI Prof Surya Sumantri 16	Kota Bandung	16319	91292022112920221201108279
8	Effendy Husin	JI Ampera Raya Kav I/5 Ged Satmarindo Lt 2	Jakarta Pusat	16277	9353202211292022120187305
9	Andre Sukendra Atmadja	JI Laksda M Nazir 11 U	Jakarta Selatan	16483	904720221129202212012292
10	Bobby Andhika	JI Panti Asuhan 2	Jakarta Pusat	15502	8826202211302022120154302
11	Beng Phiau	JI Baskara Sari 92	Kota Pasuruan	17038	9051202211292022120134226
12	Darmadi Karjanto Putro	JI Pinangsia III/15	Jakarta Pusat	17167	9105202211302022120168255
13	Andi Achmad Dara	JI Surnagung III Kav Bulak K/5	Jakarta Utara	16681	9001202211292022120114227
14	Ance Anggraeny	JI Garuda Dlm I BI B/47	Kota Bandung	16576	910220221129202212011184
15	Andi Achmad Dara	JI Sumagung III Kav Bulak K/5	Jakarta Utara	16681	9622202211302022120114117
16	Execorp Limited	Jl Raden Saleh Ruko Metro Permata Bl A-2/33	Jakarta Pusat	15758	95992022112820221201107178
17	Darwin Leo	JI Cikini Raya 8	Jakarta Pusat	16509	9164202211292022120175246
18	Christiana Halim	Jl Mampang Prapatan Raya 18	Jakarta Pusat	17224	8871202211292022120163151
19	Irwan Hermanto	JI Albaido I 29-30	Jakarta Barat	15246	95592022113020221201113226
20	Elsa Djauhari	JI Ngagel Tirtosari 19	Kota Pasuruan	16072	9543202211282022120192157



# **Link Github**

https://github.com/BagusRadityaN/File\_Task\_Jubelio



# **Link Video Presentation**

https://youtu.be/V3YgMwkVNyA

# **Thank You**





