PRAKTIKUM SISTEM DATABASE II

(Tugas 3)



Disusun Oleh:

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PROGRAM STUDI S-1 TEKNIK INFORMATIKA FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM UNIVERSITAS PADJADJARAN JATINANGOR

2022

1. Apa perbedaan dari Indexing, Primary Key, dan Unique?

a. **Indexing** : index masih diperbolehkan memiliki nilai yang berduplikat di kolom yang sama, berbeda dengan primary key dan unique dimana nilai dalam satu kolom tidak boleh ada yang sama.

b. **Primary Key** : tidak diperbolehkan memiliki nilai NULL

c. Unique : diperbolehkan memiliki nilai NULL

- 2. Buatlah contoh kasus penggunaan Index dan View masing masing 2 kasus, tuliskan kasusnya lalu sertakan query dan screenshot!
 - a. Index
 - i. Menampilkan produk yang dibeli oleh customer yang berasal dari Amerika Serikat beserta deskripsi produknya

Query:

Output Query:

FULL_NAME	COUNTRY_OF_ORIGIN	PRODUCT_ORDERED	PRODUCT_DESCRIPTION	
Matthias Cruise			Liquid Cristal Display 9 inch passive monitor.	
Harrison Sutherland	AMERICA	LCD Monitor 9/PM	Liquid Cristal Display 9 inch passive monitor.	
			Liquid Cristal Display 9 inch passive monitor.	
Meenakshi Mason	AMERICA	LCD Monitor 9/PM	Liquid Cristal Display 9 inch passive monitor.	
			Liquid Cristal Display 9 inch passive monitor.	
Ishwarya Roberts	AMERICA	LCD Monitor 9/PM	Liquid Cristal Display 9 inch passive monitor.	
			Liquid Cristal Display 9 inch passive monitor.	
Frederico Lyon	AMERICA	LCD Monitor 9/PM	Liquid Cristal Display 9 inch passive monitor.	
			CRT Monitor 17 inch (% viewable) high resolution. Exceptional image performance and the benefit of additional screen space.	
Markus Rampling	AMERICA	Monitor T7/HR/F	Monitor 17 Inch (16 viewable) high resolution, flat screen.	
Markus Rampling	AMERICA	Monitor 19/SD/M	Monitor 19 (18 Viewable) short depth, Monochrome.	
Markus Rampling	AMERICA	Monitor 19/SD/M	Monitor 19 (18 Viewable) short depth, Monochrome.	
Markus Rampling				
Meenakshi Mason	AMERICA	Monitor 21/HR/M	Monitor 21 Inch (20 viewable) high resolution, monochrome.	
Markus Rampling			Monitor 21 inch (20 viewable) high resolution, monochrome.	
Goldle Montand	AMERICA	Monitor 21/HR/M	Monitor 21 inch (20 viewable) high resolution, monochrome.	
Constantin Welles	AMERICA	Monitor Hinge - HD	Monitor Hinge, heavy duty, maximum monitor weight 30 kg	
Christian Cage	AMERICA	Monitor Hinge - HD	Monitor Hinge, heavy duty, maximum monitor weight 30 kg	
Meenakshi Mason	AMERICA	Monitor Hinge - HD	Monitor Hinge, heavy duty, maximum monitor weight 30 kg	
Markus Dameling	AMFDICA	Monitor Hiner - HD	Moreline Mines, havour di du manifra un monitor uniteda NI ko	
	ktikum_sisdat_il @en			

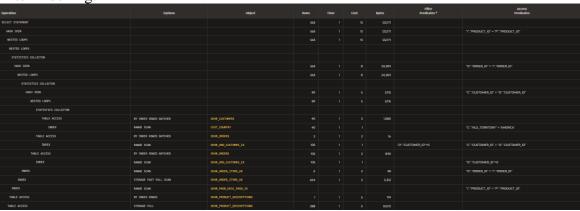
Before Indexing:



Create Index:

CREATE INDEX CUST_COUNTRY
ON OEHR_CUSTOMERS(NLS_TERRITORY);

After Indexing:



ii. Menampilkan produk yang bisa di pesan dengan garansi 1 bulan Query:

```
SELECT * FROM OEHR_PRODUCT_INFORMATION WHERE PRODUCT_STATUS = 'orderable' AND WARRANTY_PERIOD = '+01-00';
```

Output:

PRODUCT ID	PRODUCT NAME	PRODUCT DESCRIPTION	CATEGORY ID	WEIGHT CLASS	WARRANTY PERIOD	SUPPLIER ID	PRODUCT STATUS	LIST PRICE	MIN PRICE	CATALOG URL
		CRT Monitor 21 inch (20 viewelle). Digital Optifican technology: supports resolutions up to M60 x 100 at 784x. Dimensions (MWN), 8.3 x 18.5 x 5 inch. The detachation or attachation monitor-powered Platfurum Series speakes offer cities sound and the convenience of a digital audios player jack. Autify play your EQ.								http://www.supp- 102051.com/cat/hw/p3065.html
3551	Monitor 21/HR	21 inch monitor (20 inch vieweble) high resolution. This monitor is ideal for business, desktop publishing, and graphics-intensive applications. Enjoy the productivity that a large monitor can bring via more workspace for running applications.			+01-00	102083	orderable			http://www.supp- 102085.com/cat/hw/p3351.html
	Plasma Monitor 10/LE/VGA									http://www.supp- 102068.com/cat/hw/p3350.html
3054	Plasma Monitor 10/XGA	10 inch standard plasma monitor, XGA resolution. This virtually-flat, high-resolution screen delivers outstanding image quality with reduced glare.			+01-00	102060	orderable			http://www.supp- 102060.com/cat/hw/p3054.html
		Crephics Processor, resolution 1280 X 1024 pixels. High end 3D performance at a mid renge price. 15 million Goursud shaded triangles per second, Optimized 3D drivers for McDD and DCC applications, with user-customizable settings, 64/40 DDR SDRAM united frame buffer supporting true color at all supported standard resolutions.								http://www.supp- 10206l.com/cat/hw/p241l.html
	MB - \$450	PC type motherboard, 450 Series.				102072	orderable			http://www.supp- 102072.com/cet/hw/p2751.html
										http://www.supp- 102084.com/cat/hw/p3090.html
3106	KB 101/EN	Standard PC/AT Enhanced Keyboard (101/102-Key), Input locale: English (US).			+01-00	102066	orderable			http://www.supp- 102066.com/cat/hw/p3106.html
										http://www.supp- 102055.com/cet/hw/p2289.html
	KB 101/FR	Standard PC/AT Enhanced Keyboard (101/102-Key), Input locale: French.				102055	orderable			http://www.supp- 102055.com/cet/hw/p3110.html
										http://www.supp- 102055.com/cat/hw/p2058.html
	Mouse C/E	Ergonomic, cordless mouse. With track-ball for maximum comfort and ease of use.			+01-00	102099	orderable			http://www.supp- 102099.com/cet/hw/p3117.html
										http://www.supp- 102072.com/cet/hw/p2211.html
2403	CD-ROM 600/I/24x	600 MB internal read only CD-ROM drive, reading speed 24x			+01-00	102052	orderable			http://www.supp- 102052.com/cat/hw/p2403.html
										http://www.supp- 102099.com/cet/hw/p2266.html
3077	DVD 8x	DVD - ROM drive, 8x speed. Will probably become obsolete pretty soon			+01-00	102099	orderable			http://www.supp- 102099.com/cet/hw/p3077.html
5082	Modem - 56/90/E	Modem - 54kb per second, v90 PCI Global compilant. Externat, for power supply 110V. Giben Coverence 9199, 2022, Oneid				102068	orderable			

Before Indexing:

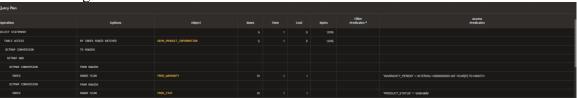
Query Plan							
Operation	Options	Object	Rows	Time	Bytes	Filter Predicates *	Access Predicates
SELECT STATEMENT							
TABLE ACCESS	STORAGE FULL	OEHR_PRODUCT_INFORMATION			1,095	"WARRANTY_PERIOD" = INTERVAL:+000000001-00" YEAR(9) TO MONTH AND "PRODUCT_STATUS" = 'orderable'	"WARRANTY_PERIOD" = INTERVAL'+000000001-00" YEAR(9) TO MONTH AND "PRODUCT_STATUS" = 'orderable'

Create Index:

CREATE INDEX PROD_STAT
ON OEHR_PRODUCT_INFORMATION(PRODUCT_STATUS);

CREATE INDEX PROD_WARRANTY
ON OEHR_PRODUCT_INFORMATION(WARRANTY_PERIOD);

After Indexing:



b. View

i. Menampilkan karyawan yang menghasilkan gaji diatas 10000

Create View:

CREATE VIEW EmpType1 AS

SELECT EMPLOYEE_ID, CONCAT(CONCAT(FIRST_NAME, ' '),
LAST_NAME) AS "EMPLOYEE_NAME", JOB_ID AS "JOB"

FROM OEHR_EMPLOYEES
WHERE SALARY > 10000
ORDER BY SALARY DESC;

Calling Query:

SELECT * FROM EmpType1

Output:

EMPLOYEE_ID	EMPLOYEE, NAME	308
100		AD_PRES
101	Neena Kochhar	AD_VP
102		AD_VP
MS	John Russell	SA_MAN
146		SA_MAN
201	Michael Hertstein	MK_MAN
205	Shelley Higgins	AC_MGR
147	Alberto Errazuriz	SA_MAN
108		FI_MGR
168		SA_REP
148		SA_MAN
114	Den Raphaely	PU_MAN
174		SA_REP
149	Eleni Zlotkey	SA_MAN
162		SA_REP
15 rows returned in 0.01 seconds Download		

ii. Menampilkan alamat lengkap dari lokasi suatu departemen yang berada di Amerika Serikat

Create View:

Calling Query:

SELECT * FROM DeptInUSA;

Output:

1				
DEPARTMENT_NAME	STREET_ADDRESS	POSTAL_CODE	CITY	STATE_PROVINCE
п				
Shipping	2011 Interiors Blvd	99236	South San Francisco	California
Administration			Seattle	Washington
Purchasing	2004 Charade Rd	98199	Seattle	Washington
Executive			Seattle	Washington
Finance	2004 Charade Rd	98199	Seattle	Washington
Accounting			Seattle	Washington
Treesury	2004 Charade Rd	98199	Seattle	Washington
Corporate Tax	2004 Charade Rd	98199	Seattle	Washington
Control And Credit	2004 Charade Rd	98199	Seattle	Washington
Shareholder Services	2004 Charade Rd		Seattle	Washington
Benefits	2004 Charade Rd	98199	Seattle	Washington
Manufacturing	2004 Charade Rd		Seattle	Washington
Construction	2004 Charade Rd	98199	Seattle	Washington
Contracting	2004 Charade Rd		Seattle	Washington
Operations	2004 Charade Rd	98199	Seattle	Washington
IT Support	2004 Charade Rd		Seattle	Washington
NOC	2004 Charade Rd	98199	Seattle	Washington
IT Helpdesk	2004 Charade Rd	98199	Seattle	Washington
Government Sales	2004 Charade Rd	98199	Seattle	Washington
Retail Sales			Seattle	Washington
Recruiting	2004 Charade Rd	98199	Seattle	Washington
Payroll				Washington
25 rows returned in 0.06 seconds Download				