Microsoft Access 2007

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PROPERTI TABEL & MENYARING DATA

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1 Properti

Pada saat merancang tabel kita dapat menerapkan beberapa properti field yang bisa berguna untuk meningkatkan pengendalian dan keamanan data, berikut adalah property yang dapat di terapkan pada tabel

FieldSize	Mengatur ukuran maksimum untuk data yang tersimpan sebagai Teks, Nomor, atau AutoNumber tipe data
Format	Menyesuaikan cara field muncul ketika ditampilkan atau dicetak.
DecimalPlaces	Tentukan jumlah tempat desimal yang digunakan ketikamenampilkan angka.
NewValues	Setel apakah field AutoNumber bertambah atau diberi nilai acak.
InputMask	Menampilkan karakter pengeditan untuk membimbing entri data.
Caption	Mengatur teks yang ditampilkan secara default dalam label untuk form, laporan, dan query
DefaultValue	Secara otomatis menetapkan nilai default ke field ketika catatan baru ditambahkan.
ValidationRule	Menetapkan ekspresi yang harus benar setiap kali anda menambah atau mengubah nilai dalam field ini.
ValidationText	Menampilkan teks ketika nilai yang dimasukan melanggar ekspresi ValidationRule.
Required	Data harus dimasukkan dalam field.
AllowZeroLength	Izinkan entri (dengan menetapkan ke Ya) dari string panjang nol ("") dalam field Teks atau Memo.
Indexed	Mempercepat akses ke data dalam field ini dengan membuat dan menggunakan indeks.
UnicodeCompression	Kompres teks yang tersimpan dalam field ini ketika sejumlah besar teks disimpan (> 4.096 karakter)
IMEMode	Pengendalian konversi karakter dalam versi Asia dari Windows.
IMESentenceMode	Pengendalian konversi karakter dalam versi Asia dari Windows.
SmartTags	Pasang tag cerdas ke bidang ini
AppendOnly	Izinkan versioning (dengan menetapkan ke Ya) dari bidangMemo.
TextFormat	Pilih Rich Text untuk menyimpan teks sebagai HTML dan memungkinkan rich formatting. Pilih Plain Text untuk menyimpan teks saja.
TextAlign	Menentukan alignment default teks dalam kontrol.

Precision	Tentukan jumlah digit diperbolehkan, termasuk yang baik ke kanan dan kiri titik desimal.
Scale	Tentukan jumlah maksimum digit yang dapat disimpan di sebelah kanan pemisah desimal.

1.1 FieldSize

FieldSize adalah ukuran data yang akan disimpan, pemilihan ukuran yang tepat akan eningkatkan kapasitas dan kememuap pengolahan data berikut adalah ukuran untuk tipe data angka.

Field Size setting	Description
Byte	A 1-byte integer containing values from 0 to 255.
Integer	A 2-byte integer containing values from -32,768 to +32,767.
Long Integer	A 4-byte integer containing values from -2,147,483,648 to 2,147,483,647.
Single	A 4-byte integer containing values from -3.4 x 10^{38} to +3.4 x 10^{38} and up to 7 significant digits.
Double	An 8-byte floating point number containing values from -1.797 x 10^{308} to +1.797 x 10^{308} and up to 15 significant digits.
Replication ID	A 16-byte globally unique identifier (GUID). Randomly generated GUIDs are long enough that they are not likely to overlap. You use them for a variety of applications, such as tracking goods.
Decimal	A 12-byte integer with a defined decimal precision that can contain values from -10^{28} to +10^{28}. The default precision is 0. The default scale (the number of decimal places displayed) is 18. You can set the scale up to 28.

1.2 Format

Format digunakan untuk menyesuaikan cara field muncul ketika ditampilkan atau dicetak. Format untuk tipe data angka antara lain

Format	Description	Example
General Number	(Default) Displays the number as entered. You can display up to 11 digits to the right or left of the decimal indicator. If a number contains more than 11 digits, or your control is not wide enough to show all the digits, Access rounds the number. For very large or very small numbers (more than 10 digits to the right or left of the decimal point), Access uses scientific notation.	123.456
Currency	Applies the currency symbol and format specified in your Windows regional settings.	$123,456
Euro	Applies the Euro symbol to your numeric data, but otherwise uses the currency format specified in your Windows regional settings.	€123,456.78
Fixed	Displays numbers without thousand separators and with two decimal places. If the value in the field contains more than two decimal places, Access rounds down the number.	1234.56
Standard	Displays numbers with thousand separators and two decimal places. If the value in the field contains more than two decimal places, Access rounds down the number to two decimal places.	1,234.56
Percent	Displays numbers as percentages with two decimal places and a trailing percent sign. If the underlying value contains more than four decimal places, Access rounds down the value.	123.50%
Scientific	Displays numbers with scientific (exponential) notation.	1.23E+04

Format untuk tanggal antara lain

Format	Description	Example
General Date	(Default) Displays date values as numbers and time values as hours, minutes, and seconds followed by AM or PM. For both types of values, Access uses the date and time separators specified in your Windows regional settings. If the value does not have a time component, Access displays only the date. If the value has no date component, Access displays only the time.	08/29/2006 10:10:42 AM
Long Date	Displays only date values as specified by the Long Date format in your Windows Regional Settings.	Monday, August 29, 2006
Medium Date	Displays the date as dd/mmm/yyyy, but uses the date separator specified in your Windows regional settings.	29/Aug/2006 29-Aug-2006
Short Date	Displays date values as specified by the Short Date format in your Windows regional settings.	8/29/2005 8-29-2006
Long Time	Displays hours, minutes, and seconds followed by AM or PM. Access uses the separator specified in the Time setting in your Windows regional settings.	10:10:42 AM
Medium Time	Displays hours and minutes followed by AM or PM. Access uses the separator specified in the Time setting in your Windows regional settings.	10:10 AM
Short Time	Displays only hours and minutes. Access uses the separator specified in the Time setting in your Windows regional settings.	10:10

Format untuk tipe data Yes/No

Format	Description
Yes/No	(Default) Displays 0 as No and any non-zero value as Yes.
True/False	Displays 0 as False and any non-zero value as True.
On/Off	Display 0 as Off and any non-zero value as On.

Custom format untuk angka

Character	Description
#	Displays a digit. Each instance of the character represents a position for one number. If no value exists in a position, Access displays a blank space. Also, the use of placeholders does not prevent you from entering data. For example, if you apply this format: **#,###**, but enter a value of 45 in a field, you see nothing but the number 45. If you enter 12,145 in a field, Access displays 12,145 — even though you defined only one placeholder to the left of the thousands separator.
0	Displays a digit. Each instance of the character represents a position for one number. If no value exists in a position, Access displays a zero (0).
Thousands and decimal separators	Indicates where you want Access to place the thousands and decimal separators. Use the separators defined in your Windows regional settings. For information about those settings, see How Windows regional settings affect formatting, earlier in this topic.
blank spaces, + - $ ()	Use blank spaces, some math characters (+ -), and financial symbols (¥ £ $) as needed anywhere in your format strings. If you want to use other common math symbols, such as slash (\ or /) and the asterisk (*), surround them in double quotation marks — note that you can place them anywhere.
"Literal text"	Surrounds any text that you want users to see in double quotation marks.
\	Forces Access to display the character that immediately follows. This is the same as surrounding a character in

	double quotation marks.
!	Forces left alignment of all values. When you force left alignment, you can not use the # and 0 digit placeholders, but you can use placeholders for text characters. For more information about those placeholders, see Apply custom formats to text or memo data, later in this topic.
*	When used, the character immediately following the asterisk becomes a fill character — a character used to fill blank spaces. Access normally displays numeric data as right-aligned, and it fills any area to the left of the value with blank spaces. You can add fill characters anywhere in a format string, and when you do so, Access fills any blank spaces with the specified character. For example, the format £##*~.00 renders a currency amount as £45~~~~~.15. The number of tilde characters (~) inserted into the record depends on the number of blank spaces in the table field.
%	Use as the last character in a format string. Multiplies the value by 100 and displays the result with a trailing percent sign.
E+, E- –or– e+, e-	Displays values in scientific (exponential) notation. Use this option when the predefined scientific format doesn't provide enough room for your values. Use E+ or e+ to display values as positive exponents, and E- or e- to display negative exponents. You must use these placeholders with other characters. For example, suppose you apply the format 0.000E+00 to a numeric field and then enter 612345. Access displays 6.123E05. Access first rounds the number of decimal places down to three (the number of zeroes to the right or left of the decimal separator). Next, Access calculates the exponent value from the number of digits that fall to the right (or left, depending on your language settings) of the decimal separator in the original value. In this case, the original value would have placed "02223" (five digits) to the right of the decimal point. For that reason, Access displays 6.123E+05, and the resulting value is the equivalent of 6.123×10^5.
[color]	Applies a color to all values in a section of your format. You must enclose the name in brackets and use one of these names: black, blue, cyan, green, magenta, red, yellow, and white.

Custom format untuk teks dan memo

Character	Description
@	Displays any available character for its position in the format string. If Access places all characters in the underlying data, any remaining placeholders appear as blanks. For example, if the format string is @@@@@ and the underlying text is ABC, the text appears as left-aligned and with two blank spaces to the left of the characters.
&	Displays any available character for its position in the format string. If Access places all characters in the underlying data, any remaining placeholders display nothing. For example, if the format string is &&&&& and the text is ABC, you see only the left-aligned text.
!	Forces Access to fill placeholder characters from left to right instead of right to left. You must use this character at the start of any format string.
<	Forces all text to lowercase. You must use this character at the beginning of a format string, but you can precede it with an exclamation point (!).
>	Forces all text to uppercase. You must use this character at the beginning of a format string, but you can precede it with an exclamation point (!).
*	When used, the character immediately after the asterisk (*) becomes a fill character — a character used to fill blank spaces. Access normally displays text as left aligned and fills any area to the right of the value with blank spaces. You can add fill characters anywhere in a format string, and when you do so, Access fills any blank spaces with the specified character.
Blank space, + - $ ()	Use blank spaces, some math characters (+ -), and financial symbols ($ ¥ £) as needed anywhere in your format strings. If you want to use other common math symbols, such as slash (\ or /) and the asterisk (*), surround them in double quotation marks — note that you can place them anywhere.

"Literal text"	Surround any text that you want users to see in double quotation marks.
\	Forces Access to display the character that immediately follows. This is the same as surrounding a character in double quotation marks.
[color]	Applies a color to all values in a section of your format. You must enclose the name in brackets and use one of these names: black, blue, cyan, green, magenta, red, yellow, and white.

1.3 Input Mask

Menampilkan karakter pengeditan untuk membimbing entri data.

Character	Use
0	Digit. You must enter a single digit in this position.
9	Digit. Single digits in this position are optional.
#	Enter a digit, a space, or a plus or minus sign in this position. If you skip this position, Access enters a blank space.
L	Letter. You must enter a single letter in this position.
?	Letter. Single letters in this position are optional.
A	Letter or digit. You must enter a single letter or digit in this position.
a	Letter or digit. Single letters or digits in this position are optional.
&	Any character or space. You must enter either a single character or a space in this position.
C	Any character or space. Characters or spaces in this position are optional.
. , : ; - /	Decimal and thousands placeholders, date and time separators. The character you select depends on your Microsoft Windows regional settings.
>	All characters that follow appear in uppercase.
<	All characters that follow appear in lowercase.
!	Causes the input mask to fill from left to right instead of from right to left.
\	Forces Access to display the character that immediately follows. This is the same as enclosing a character in double quotation marks.
"Literal text"	Encloses any text that you want users to see in double quotation marks.
Password	In Design view for tables or forms, setting the **Input Mask** property to **Password** creates a password entry box. When users type passwords in the box, Access stores the characters but displays asterisks (*).

Contoh

This input mask	Provides this type of value	Notes
(000) 000-0000	(206) 555-0199	In this case, you must must enter an area code because that section of the mask (000, enclosed in parentheses) uses the 0 placeholder.
(999) 000-0000!	(206) 555-0199 ( ) 555-0199	In this case, the area code section uses the 9 placeholder, so area codes are optional. Also, the exclamation point (!) causes the mask to fill in from left to right.
(000) AAA-AAAA	(206) 555-TELE	Allows you to substitute the last four digits of a U.S. style phone number with

#999	-20 2000	Any positive or negative number, no more than four characters, and with no thousands separator or decimal places.
>L????L?000L0	GREENGR339M3 MAY R 452B7	A combination of mandatory (L) and optional (?) letters and mandatory numbers (0). The greater-than sign forces users to enter all letters in uppercase. To use an input mask of this type, you must set the data type for the table field to **Text** or **Memo**.
00000-9999	98115- 98115-3007	A mandatory postal code and an optional plus-four section.
>L<?????????????	Maria Pierre	A first or last name with the first letter automatically capitalized.
ISBN 0-&&&&&&&&&-0	ISBN 1-55615-507-7	A book number with the literal text, mandatory first and last digits, and any combination of letters and characters between those digits.
>LL00000-0000	DB51392-0493	A combination of mandatory letters and characters, all uppercase. Use this type of input mask, for example, to help users enter part numbers or other forms of inventory correctly.

Untuk mencoba beberapa properti tersebut buka kembali DatabasePerpustakaan kemudian lakukan langkah berikut

1. Buka TabelMahasiswa di Desain View
2. Buat Field baru dengan nama NoTelp dengan tipe data Text 20 (jika belum ada)
3. Kemudian terapkan properti berikut

Field	Properti	Value
Nama	Required	Yes
	SmartTag	Person Name
Kelas	TextAlign	Center
NoTelp	Input Mask	(999) 999 999999999
	Required	Yes

4. Simpan Tabel tersebut
5. Buka tabel di Datasheet View
6. Masukan beberapa data baru berikut

7. Dengan cara yang sama dengan atas ubah properti dari TabelBuku dan TabelPeminjaman

TabelBuku

Field	Properti	Value
KodeBuku	Input Mask	TI000
Judul	Format	>
	Required	Yes
Penulis	Format	>
	Required	Yes
Penerbit	Format	>

TabelPeminjaman

Field	Properti	Value
NIM	Required	Yes
KodeBuku	Required	Yes
TanggalPinjam	Required	Yes
TanggalJadwalKembali	Required	Yes

8. Masukan masing-masing 5 data ke dalam TabelBuku dan TabelPeminjaman

2   Menyaring Data

Ada 4 cara untuk menyaring dalam Access 2007 yaitu melelui Filter, Selection, dan Advanced

2.1   Menyaring dengan Filter

1. Buka TabelBuku kemudian pindahkan kursor ke salah satu penerbit (misalnya Andi)

2. Klik Tab Home kemudian klik tombol Filter kemudian pilh hanya penerbit andi, klik OK

3. Maka yang akan ditampilkan hanya Buku dangan penerbit Andi saja

4. Untuk membersihkan filter klik pada smart tag di kolom Penerbit, kemudian pilih Clear filte
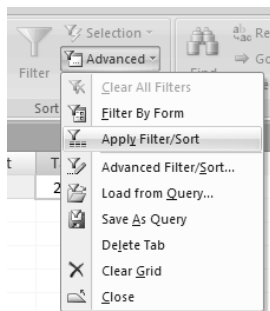from Penerbit, klik OK
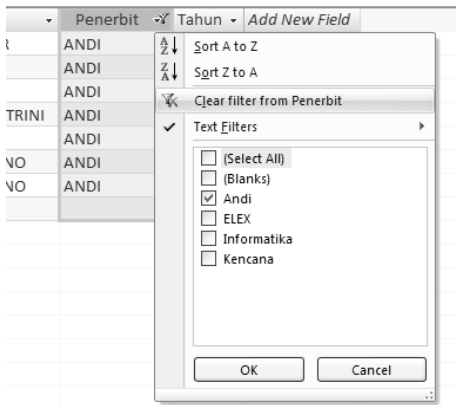
2.2 Menyaring dengan Selection

Ada empat pilihan penyaringan dengan selection yaitu Equal, Does not equal, Contain dan, Does not
contain

1. Masih di TabelBuku, klik pada field Tahun pilih salah satu tahun, klik Selection, kemudian
pilih Between…
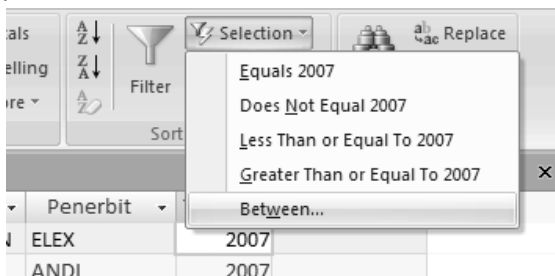
2. Masukan Tahun terkecil dan terbesar, klik OK

3. Maka akan ditampilkan semua buku diantara tahun tersebut

4. Untuk membersihkan filter klik pada smart tag di kolom Tahun, kemudian pilih Clear filter from Tahun, klik OK

2.3   Menyaring dengan Anvanced

1. Masih di TabelBuku, klik Advanced kemudian pilih Filter By Form
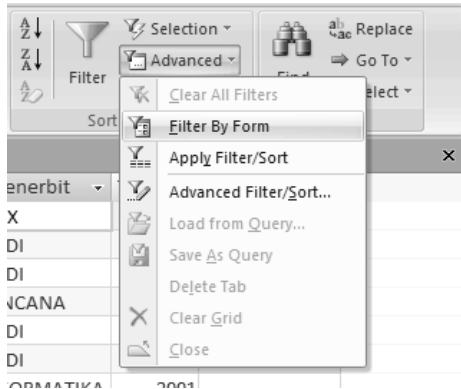
2. Kemudian masukan kata kunci "Andi" pada kolom Penerbit dan 2007 pada kolom Tahun

3. Klik kembali Anvanced pilih Aplly Filter/Sort

4. Data yang tampil seperti berikut

5. Bersihkan filter dengan klik pada Smart Tag
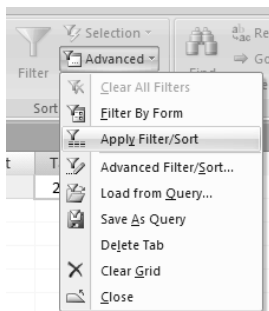
2.4   Menyaring menggunakan Or

1. Masih di TabelBuku, klik Advanced pilih Filter By Form
2. Kemudian masukan kata kunci "Andi" pada kolom Penerbit, kemudian klik Or di bawah jendela
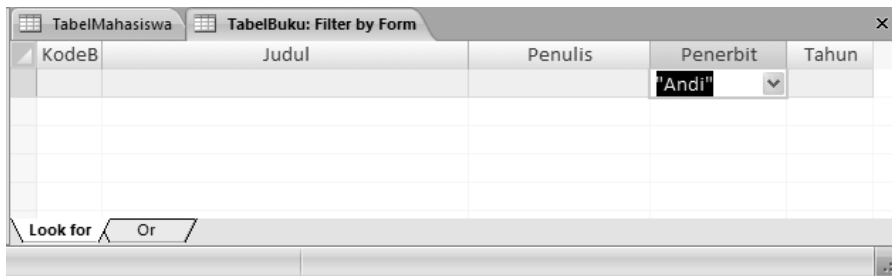
3. Kemudian masukan kata kunci 2007 pada kolom Tahun
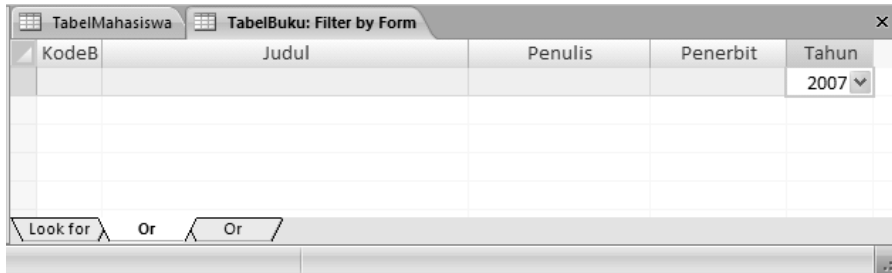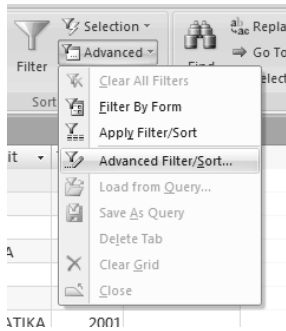

4. Klik kembali Anvanced pilih Aplly Filter/Sort

5. Data yang tampil seperti berikut

Kod ▾	Judul ▾	Penulis ▾	Penerbit ∇	Tahun ∇	Ad
⊞ TI002	TEKNOLOGI INFORMASI	ABDUL KADIR	ANDI	2003	
⊞ TI003	VISUAL BASIC	KUSRIMI	ANDI	2007	
⊞ TI004	TURBO PASCAL	JOGIYANTO	ANDI	2001	
⊞ TI005	MICROSOFT ACCESS 2007	WINPEC SOLUTION	ELEX	2007	
⊞ TI006	125 PERTANYAAN SEPUTAR ACCESS 2007	RATIH WIDIATRINI	ANDI	2007	
⊞ TI007	BELAJAR SENDIRI SQL	BEN FORTA	ANDI	2000	
⊞ TI009	PERCEPTION GAMES	ADI SOENARNO	ANDI	2007	
⊞ TI010	TEAM BUILDING	ADI SOENARNO	ANDI	2007	

6. Bersihkan filter dengan klik pada smart tag di kolom Penerbit dan Tahun, kemudian pilih Clear filter

2.5 Menyaring dengan Advanced Filter/Sort

1. Masih di TabelBuku, klik Advanced lalu pilih Advanced Filter/Sort

2. Kemudian pada baris Field pilih Judul dan Penerbit, pada baris Sort dibawah KodeBuku pilih Ascending, pada baris Kriteria tulis "Andi"

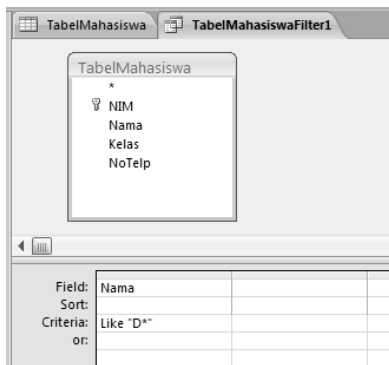3. Klik kembali Anvanced pilih Aplly Filter/Sort
4. Sehingga tampil

5. Bersihkan filter di kolom Penerbit

2.6 Menyaring menggunakan Wildcard

Access mengenal beberapa Wildcard seperti *, ?, ! dll, berikut daftar selengkapnya

CHARACTER	DESCRIPTION	EXAMPLE
*	Matches any number of characters. You can use the asterisk (*) anywhere in a character string.	**wh*** finds what, white, and why, but not awhile or watch.
?	Matches any single alphabetic character.	**B?ll** finds ball, bell, and bill.
[ ]	Matches any single character within the brackets.	**B[ae]ll** finds ball and bell, but not bill.
!	Matches any character not in the brackets.	**b[!ae]ll** finds bill and bull, but not ball or bell.
-	Matches any one of a range of characters. You must specify the range in ascending order (A to Z, not Z to A).	**b[a-c]d** finds bad, bbd, and bcd.
#	Matches any single numeric character.	**1#3** finds 103, 113, and 123.

1. Buka TabelMahasiswa, klik Advanced pilih Advanced Filter/Sort
2. Pada baris Field pilih Nama, pada bais Criteria tulis Like "D*"

3. Klik kembali Anvanced pilih Aplly Filter/Sort

4. Bersihkan filter di kolom Nama

2.7 Mencari Data

1. Buka tabel tempat data akan dicari yaitu TabelBuku

2. Klik tombol Find

3. Masukan parameter pencarian Find What : Elex, Look In: TabelBuku, Match: Any Part of Field, dan Search: All kemudian klik Find Next

4. Maka Access akan segera mencari data dimaksud dan menunjukannya

2.8 Mengganti Data

1. Buka tabel tempat data akan dicari yaitu TabelBuku, pindahkan kursor ke field Penerbit
2. Klik tombol Replace
3. Masukan parameter pencarian Find What : Elex, Replace: Elex Media, Look In: Penerbit, Match: Whole Field, dan Search: All kemudian klik Find Next kemudian Replace

4. Maka Access akan segera mencari data dimaksud dan menggantinya

	KodeBuku	Judul	Penulis	Penerbit	Tahun	Add
TI003	VISUAL BASIC	KUSRIMI	ANDI	2007	
TI004	TURBO PASCAL	JOGIYANTO	ANDI	2001	
TI002	TEKNOLOGI INFORMASI	ABDUL KADIR	ANDI	2003	
TI010	TEAM BUILDING	ADI SOENARNO	ANDI	2007	
TI008	STUDI KELAYAKAN BISNIS	KASMIR	KENCANA	2003	
TI009	PERCEPTION GAMES	ADI SOENARNO	ANDI	2007	
TI005	MICROSOFT ACCESS 2007	WINPEC SOLUTION	ELEX MEDIA	2007	
TI007	BELAJAR SENDIRI SQL	BEN FORTA	ANDI	2000	
TI001	ALGORITMA & PEMROGRAMAN	RINALDI MUNIR	INFORMATIKA	2001	
TI006	125 PERTANYAAN SEPUTAR ACCESS 2007	RATIH WIDIATRINI	ANDI	2007	