

**A**

# Descrição de um Demo Database

# Userview: Employees

=====  
FILE ADDITIONAL DESCRIPTION  
=====

\*  
\*\*\*\*\*  
DESCRIPTION OF OBJECTS (NOT FIELDS) CONTAINED IN THE FILE  
\*\*\*\*\*  
\*  
UNIQUE DESCRIPTION OF EMPLOYEES OF AN INTERNATIONAL ENTERPRISE  
\*  
\*\*\*\*\*  
FOR EACH OBJECT THE FOLLOWING INFORMATION IS STORED:  
1. PURPOSE DATA IS STORED FOR  
2. WHAT INFORMATION IS STORED (IN GENERAL)  
3. WHERE DOES DATA COME FROM (IN GENERAL)  
\*\*\*\*\*  
\*  
1. THE EMPLOYEES DATA MAINTAINED IN THIS FILE APPLIES TO THE MOST  
IMPORTANT AND MOST FREQUENTLY USED FUNCTIONS OF PERSONNEL  
ADMINISTRATION WITHIN THE INTERNATIONAL ENTERPRISE AND ITS LOCAL  
COMPANIES IN THE VARIOUS COUNTRIES.  
FOR MOST APPLICATIONS THE EMPLOYEES DATA IS THE PRIMARY INFORMATION  
AND ALL OTHER INFORMATION (VEHICLES) ARE DEPENDING ON IT.  
\*  
2. THE EMPLOYEES DATA COVERS ONLY THE MAIN ASPECTS OF  
- PERSONAL INFORMATION (NAME, ADDRESS, DATE OF BIRTH ...)  
- JOB INFORMATION (POSITION, INCOME, VACATION ...)  
- PERSONAL SKILLS (LANGUAGES SPOKEN)  
\*  
3. THE DATA FOR THIS FILE IS SUPPLIED BY EACH LOCAL COMPANY FOR ITS  
EMPLOYEES WITHIN THE INTERNATIONAL ENTERPRISE.

# Uersview: Employees

Ty	L	Field ID	F	Length	Occ	D	DB	S
*_	-	-----	*_	-----	---	*	--	*
1		PERSONNEL-ID Field is defined as unique C= COUNTRY	A	8.0		D	AA	
GR 1		FULL-NAME NAME INFORMATION					AB	
2		FIRST-NAME FIRST/CHRISTIAN NAME	A	20.0			AC	N
2		MIDDLE-I MIDDLE INITIAL	A	1.0			AD	N
2		NAME SURNAME/FAMILY NAME	A	20.0		D	AE	
1		MIDDLE-NAME SECOND/MIDDLE NAME	A	20.0			AD	N
1		MAR-STAT M=MARRIED S=SINGLE D=DIVORCED	A	1.0			AF	F
1		SEX M=MALE F=FEMALE	A	1.0			AG	F
1		BIRTH BIRTH-DATE (YYYYMMDD)	N	8.0		D	AH	
GR 1		FULL-ADDRESS					A1	
MU 2		ADDRESS-LINE ALL ADDRESS LINES	A	20.0	8		AI	N
2		CITY MAIN CITY/TOWN	A	20.0		D	AJ	N
2		ZIP POSTAL ADDRESS CODE	A	10.0			AK	N
2		COUNTRY COUNTRY CODE	A	3.0			AL	N
GR 1		TELEPHONE					A2	
2		AREA CODE PHONE NUMBER PREFIX	A	6.0			AN	N
2		PHONE PHONE (SELECT) NUMBER	A	15.0			AM	N
1		DEPT DDDDSS	A	6.0		D	AO	
1		JOB-TITLE	A	25.0		D	AP	N

# Userview: Employees

PE 1	INCOME				AQ
	ANNUAL INCOMES				
	DURING YEARS WITH THE INTER-				
	NATIONAL ENTERPRISE				
2	CURR-CODE	A	3.0		AR N
	CURRENCY OF INCOME				
2	SALARY	P	9.0		AS N
	ANNUAL SALARY				
MU 2	BONUS	P	9.0	12	AT N
	BONUS PER YEAR				
	IN CURRENCY UNIT				
GR 1	LEAVE DATA				A3
	LEAVE/VACATION INFO				
	FOR EMPLOYEE WITHIN 1 YEAR				
2	LEAVE-DUE	N	2.0		AU
	VACATION DAYS/YEAR				
	EMPLOYEE IS ENTITLED TO				
2	LEAVE-TAKEN	N	2.0		AV N
	VACATION DAYS TAKEN				
	IN THIS YEAR				
PE 1	LEAVE-BOOKED			20	AW
	VACATION PLANNED				
2	LEAVE-START	N	8.0		AX N
	FIRST VACATION DAY				
2	LEAVE END	N	8.0		AY N
	LAST VACATION DAY				
MU 1	LANG	A	3.0	15 D	AZ N
	LANGUAGES SPOKEN				
PH 1	PHONETIC-NAME	A	20.0		D PH
	Source field(s)			End	DB
	NAME			20	AE
	PHONETIC LAST NAME				
HY 1	LEAVE-LEFT	B	4.0		D H1 N
	Source field(s)			Start	End
	LEAVE-DUE(1-2)			1	2
	LEAVE-TAKEN(1-2)			1	2
	VACATION DAYS LEFT				
SB 1	DEPARTMENT	A	4.0		D S1
	Source field(s)			Start	End
	DEPT(1-4)			1	4
	MAINDEPT. CODE DDDD				
SP 1	DEPT-PERSON	A	26.0		D S2
	Source field(s)			Start	End
	DEPT(1-6)			1	6
	NAME(1-20)			1	20
	DEPT + LAST NAME				
SP 1	CURENCY-SALARY	A	12.0		D S3
	Source field(s)			Start	End
	CURR-CODE(1-3)			1	3
	SALARY(1-9)			1	9
	CURR. CODE + SALARY				



# Userview: Vehicles

=====  
FILE ADDITIONAL DESCRIPTION  
=====

\*  
\*\*\*\*\*  
DESCRIPTION OF OBJECTS (NOT FIELDS) CONTAINED IN THE FILE  
\*\*\*\*\*  
\*  
UNIQUE DESCRIPTION OF AUTOMOBILES BEING USED BY THE EMPLOYEES  
OF THE INTERNATIONAL ENTERPRISE AND EITHER OWNED PRIVATELY OR BY  
THE LOCAL COMPANY.  
\*\*\*\*\*  
FOR EACH OBJECT THE FOLLOWING INFORMATION IS STORED:  
1. PURPOSE DATA IS STORED FOR  
2. WHAT INFORMATION IS STORED (IN GENERAL)  
3. WHERE DOES THE DATA COME FROM (IN GENERAL)  
\*\*\*\*\*  
\*  
1. THE VEHICLE DATA MAINTAINED IN THIS FILE APPLIES TO THE MOST  
IMPORTANT AND MOST FREQUENTLY USED FUNCTIONS TO ADMINISTER ALL  
PERSONNEL MATTERS RELATED TO A CAR AND ADMINISTER ALL COMPANY CARS  
OF THE INTERNATIONAL ENTERPRISE.  
USUALLY CAR INFORMATION IS USED COMING FROM EMPLOYEES DATA.  
\*  
2. THE INFORMATION APPLIES TO  
- DAR DESCRIPTION (MAKE, MODEL, COLOR ...)  
- MAINTENANCE DATA (DATE ACQUIRED, MAINTENANCE COSTS ...)  
- CAR OWNER  
\*  
3. THE DATA FOR A VEHICLE IS ENTERED BY THE LOCAL COMPANY WHICH OWNS  
THE CAR OR TO WHICH THE EMPLOYEE OWNING THE CAR BELONGS TO.

# Uersview: Vehicles

Ty	L	Field ID	F	Length	Occ	D	DB	S
*_	-	-----	*_	-----	---	*	--	*
1		REG-NUM CAR'S REGISTR. NUMBER	A	15.0		D	AA	N
1		CHASSIS-NUM MANUFACTURER NUMBER	I	4.0			AB	F
1		PERSONNEL-ID IDENT. OF CAR USER	A	8.0		D	AC	
GR	1	CAR-DETAILS DESCRIPTION OF THE CAR						
2		MAKE	A	20.0		D	AD	N
2		MODEL	A	20.0			AE	N
2		COLOR	A	10.0		D	AF	N
2		COLOUR	A	10.0		D	AF	N
1		YEAR MANUFACTURING YEAR	N	4.0			AG	N
1		CLASS P=PRIVATE C=COMPANY	A	1.0		D	AH	F
1		LEASE-PUR L=LEASED P=PURCHASED	A	1.0			AI	F
1		DATE-ACQ DATE THE CAR WAS ACQUIRED	N	8.0			AJ	N
1		CURR-CODE CURRENCY OF CAR COST	A	3.0			AL	N
MU	1	MAINT-COST MAINTENANCE COST	P	7.0	60		AM	N
SP	1	DAT-ACQ-DESC Source field(s)	B	6.0		D	AN	
		DATE-ACQ(5-8)		Start 5 End 8			DB	AJ(5-8)
		DATE-ACQ(3-4)		Start 3 End 4				AJ(3-4)
		YEARS CAR IN USE						
SP	1	MODEL-YEAR-MAKE Source field(s)	A	24.0		D	AO	
		YEAR(1-2)		Start 1 End 4				DB
		MAKE(1-20)		Start 1 End 20				AG(1-4)
		YEAR + CAR MAKE						AD(1-20)





**B**

# Exercícios

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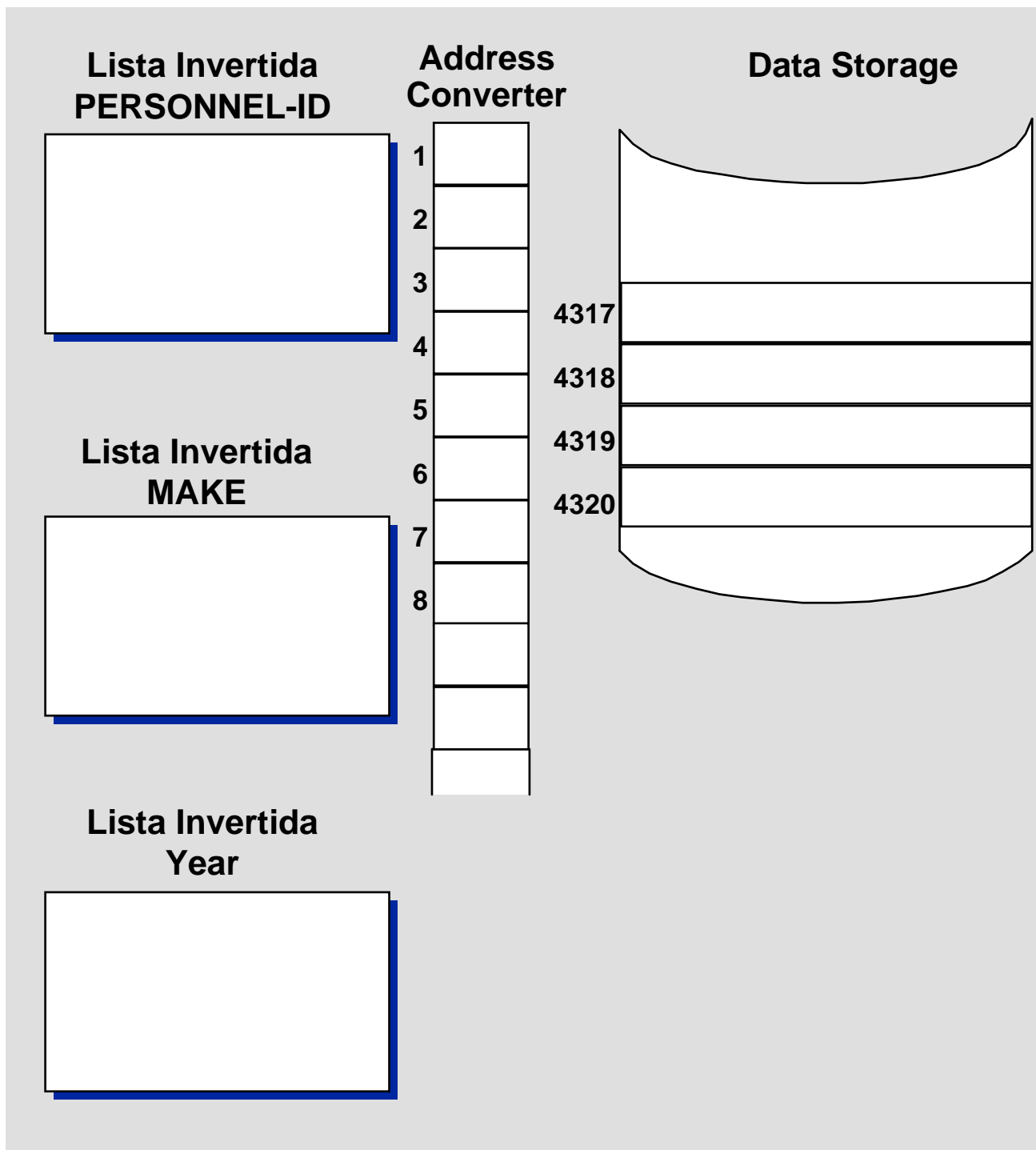
# Exercícios para o capítulo 3 - Adabas - Arquitetura

**Capítulo 3 explica a estrutura de um arquivo Adabas. Existem os seguintes dados de entrada para um arquivo de veículos:**

ISN	PERSONNEL-ID	REG-NUM	MAKE	MODEL	COLOR	CLASS	YEAR
1	20000400	30869751	FORD	LTD	BLACK	P	2000
2	20010500	30809521	GENERAL MOTORS	STATION WAGON	BLACK	P	2000
3	20003200	31026349	CHRYSLER	PLYMOUTH	GREEN	P	1999
4	20030300	30936004	MERCEDES-BENZ	280 S	BLUE	P	1995
5	20015700	30952839	GENERAL MOTORS	PONTIAC	YELLOW	P	1998
6	20000900	30704515	GENERAL MOTORS	CHEVROLET	WHITE	P	1993
7	20001900	30705749	MERCEDES-BENZ	NEW YORKER	GREY	P	2001
8	20002500	30874540	CHRYSLER	PLYMOUTH	GREY	C	1999

- Crie o Data Storage para este arquivo. Ele é suficiente para representar cada carro pelo ISN e número de registro. O intervalo de dados começa no RABN 4317.**
- Crie o Address Converter e as listas invertidas para os descritores PERSONNEL-ID, MAKE, e YEAR.**

# Exercício para o capítulo 3 - Adabas - Arquitetura

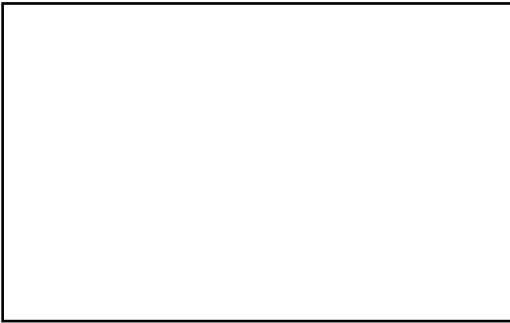


**Capítulos 3 e 4 explicam o conceito de armazenamento no Adabas e o conceito de user view.**

- Crie para o arquivo vehicles na página B-2 a lista invertida para o superdescritor YEAR-MAKE (YEAR (1-4), MAKE (1-20)).**
- Descreva as ações necessárias para garantir que programas de aplicação continuem a executar, se:**
  - a) O DBA modifica a seqüência física dos campos dentro de um arquivo Adabas**
  - b) O tamanho de um campo é modificado**
  - c) Um arquivo Adabas necessita um novo campo**
  - d) O DBA combina dois arquivos Adabas em um arquivo contendo dois tipos de registros.**
- Como podemos determinar quais arquivos, user views, programas e mapas são afetados pelas mudanças?**

## Exercício par o capítulo 4 - Adabas – Definição de arquivos

**Lista Invertida**  
**YEAR-MAKE**



a)

b)

c)

d)

### Capítulo 5 explica os comandos de acesso Adabas.

- Nome de cinco tipos de acesso Adabas.
- Determine o(s) tipo(s) de acesso apropriado(s) para as seguintes queries:\*
  - a) Liste todos empregados trabalhando no departamento "SALE20".
  - b) O mesmo que em a), mas em ordem alfabética.
  - c) Liste todos os empregados nascidos entre 1960 e 1970, classificados por "birth".
  - d) Liste todos os empregados em ordem de "hiring date".\*\*
  - e) Liste o empregado que dirige o carro com o registro número "31016771".
  - f) Liste todos os motoristas.

\* Userviews de Employees e Vehicles estão no Apêndice A

\*\* ISNREUSE=NO

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## Exercícios para o capítulo 5 - Adabas – Lógica de Acesso

### Tipos de Acesso:

### Queries:

a)

b)

c)

d)

e)

f)

