

# HMGCase for DBF

## Quick manual

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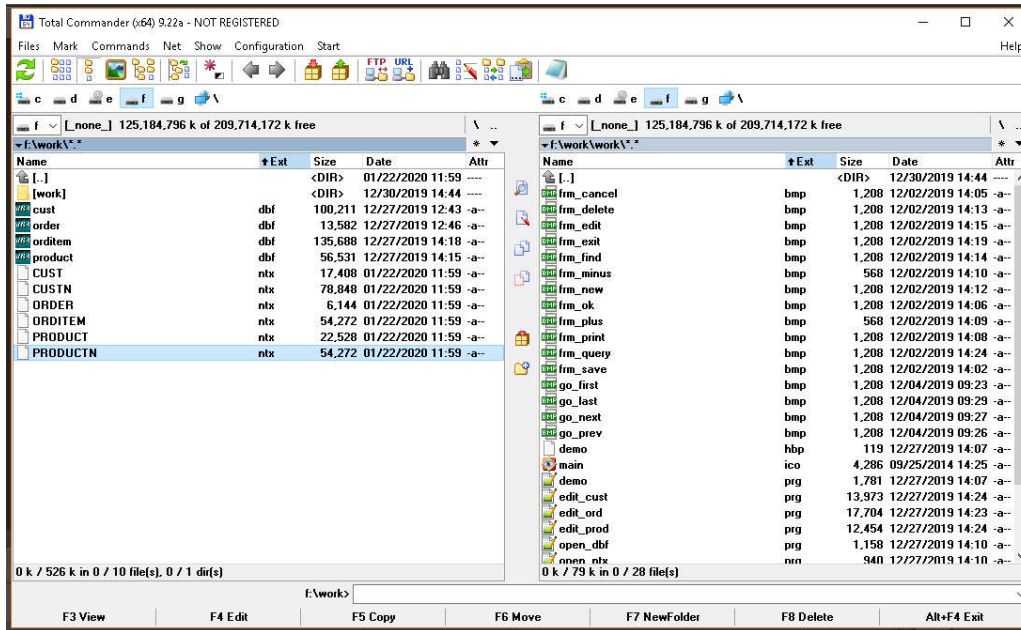
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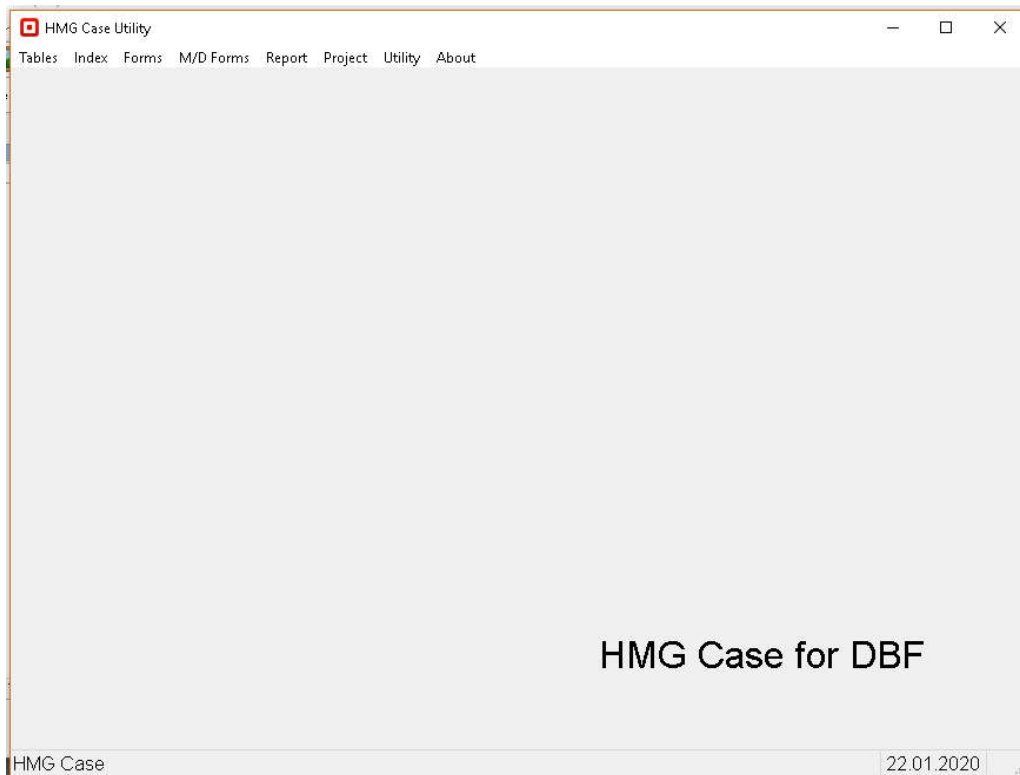
## At start

You have hmgcase.exe and add folder with icons (bmp) and sbr\_lov.prg with basic functions.

You probably have a folder with your data, DBF and NTX, select it



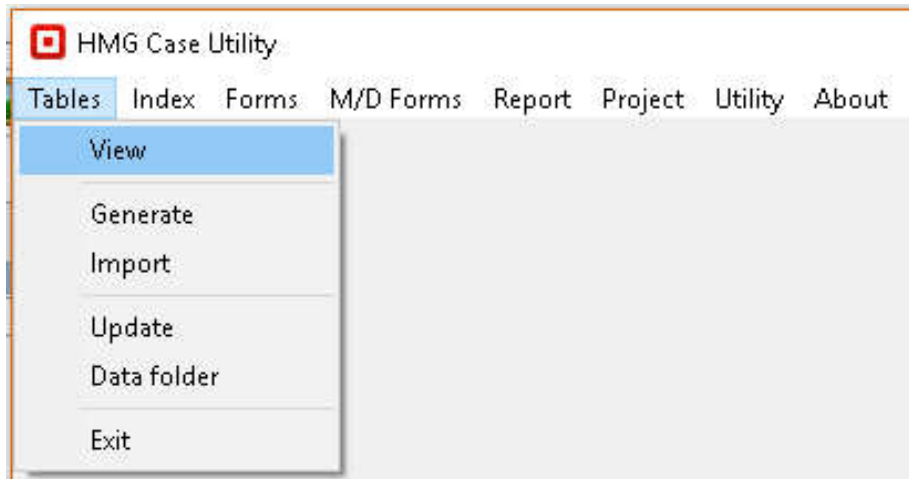
Just start hmgcase.exe



What's happen? Nothing or something?

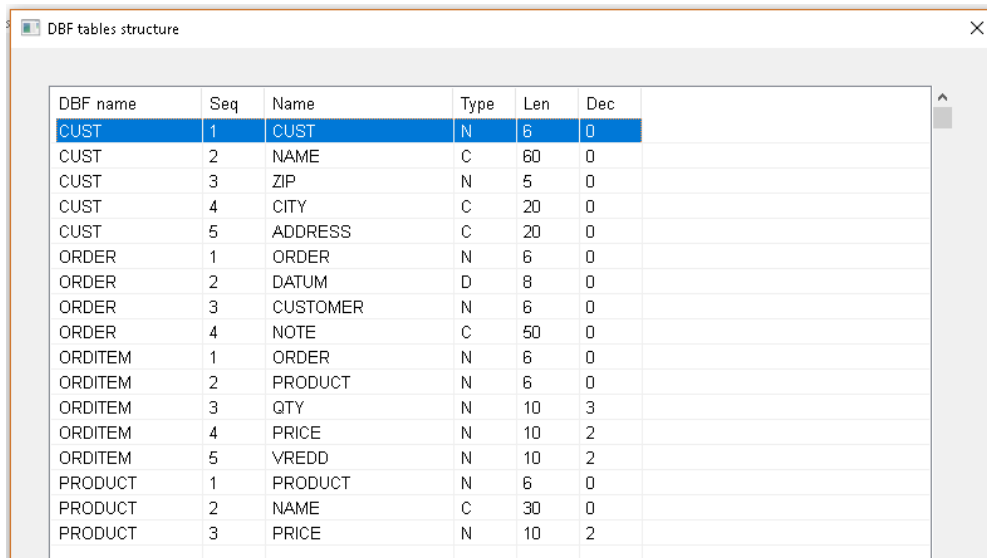
Note: table is DBF file

## Tables



## View

Click on Tables-View you can see table structure

The image shows a screenshot of the 'DBF tables structure' window. It displays a table with columns: DBF name, Seq, Name, Type, Len, and Dec. The first row is highlighted in blue.

DBF name	Seq	Name	Type	Len	Dec
CUST	1	CUST	N	6	0
CUST	2	NAME	C	60	0
CUST	3	ZIP	N	5	0
CUST	4	CITY	C	20	0
CUST	5	ADDRESS	C	20	0
ORDER	1	ORDER	N	6	0
ORDER	2	DATUM	D	8	0
ORDER	3	CUSTOMER	N	6	0
ORDER	4	NOTE	C	50	0
ORDITEM	1	ORDER	N	6	0
ORDITEM	2	PRODUCT	N	6	0
ORDITEM	3	QTY	N	10	3
ORDITEM	4	PRICE	N	10	2
ORDITEM	5	VREDD	N	10	2
PRODUCT	1	PRODUCT	N	6	0
PRODUCT	2	NAME	C	30	0
PRODUCT	3	PRICE	N	10	2

When exit program you can see **open\_dbf.prg** with table structure, function create table if not exist.

Sample:

```

*:*****
*: Program OPEN_DBF.PRG
*:*****

PROCEDURE open_dbf

LOCAL alist_fld

if ! file ("CUST.dbf")
    alist_fld := {}
    aadd(alist_fld,{"CUST","N",6,0})
    aadd(alist_fld,{"NAME","C",60,0})
    aadd(alist_fld,{"ZIP","N",5,0})
    aadd(alist_fld,{"CITY","C",20,0})
    aadd(alist_fld,{"ADDRESS","C",20,0})
    dbcreate("CUST",alist_fld)
endif

etc

```

## Generate

Create open\_dbf.prg

## Import

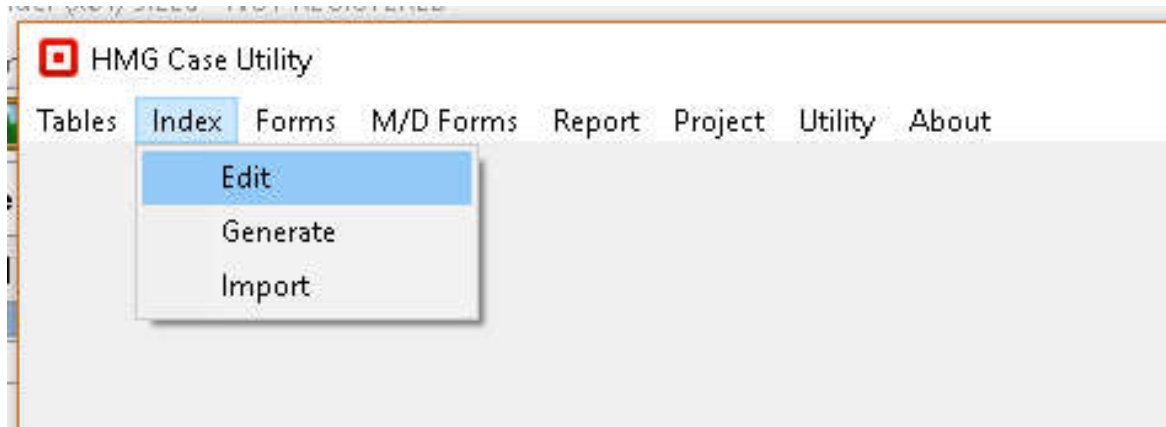
After change structure you can import new structure

## Update

On table right click you have two option, delete from data dictionary or update structure.

## Index

For index maintenance



## Edit

The screenshot shows the 'Indexes' window with a table of database indexes. The table has five columns: DBF, Ord, NTX, Unique?, and Key. The first row is highlighted in blue.

DBF	Ord	NTX	Unique?	Key
CUST	1	CUST		CUST
CUSTN*	1	CUSTN		NAME
ORDER	1	ORDER		ORDER
ORDITEM	1	ORDITEM		ORDER
PRODUCT	1	PRODUCT		PRODUCT
PRODUCTN	1	PRODUCTN		NAME

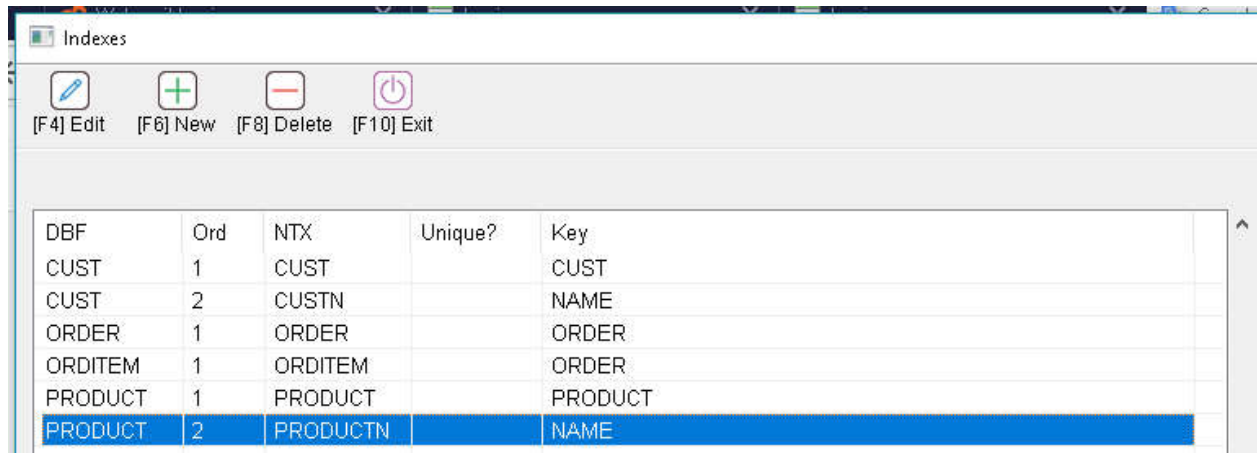
## Import

Like table, program import indexes. One table can have many indexes,

If the table has multiple index then you must mark it

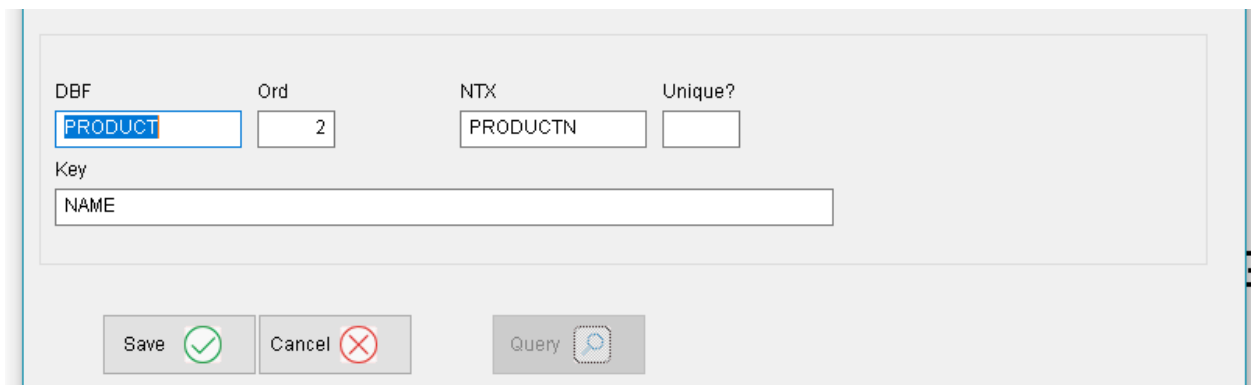
help: if there is no table like index then it is marked with \* at the end

like in this case



DBF	Ord	NTX	Unique?	Key
CUST	1	CUST		CUST
CUST	2	CUSTN		NAME
ORDER	1	ORDER		ORDER
ORDITEM	1	ORDITEM		ORDER
PRODUCT	1	PRODUCT		PRODUCT
PRODUCT	2	PRODUCTN		NAME

Edit, New or Delete can be with Function keys or click on button.



DBF	Ord	NTX	Unique?
<input type="text" value="PRODUCT"/>	<input type="text" value="2"/>	<input type="text" value="PRODUCTN"/>	<input type="text"/>

Key

Save ☒ Cancel ☒ Query

## Generate

After change indexes you can create **open\_ntx.prg**, function for create indexes if not exist, and function for reindex.

Sample:

```
*:*****
```

```
*: Program OPEN_NTX.PRG
```

```
*:*****
```

```
PROCEDURE open_ntx
```

```
if ! file ("CUST.ntx")
```

```
    use CUST
```

```
    index on CUST to CUST
```

```
    use
```

```
endif
```

```
etc
```

```
RETURN
```

```
*:*****
```

```
*: Program RE_INDEX.PRG
```

```
*:*****
```

```
PROCEDURE re_index
```

```
    DELETE FILE CUST.ntx
```

```
etc
```

```
    open_ntx()
```

```
RETURN
```

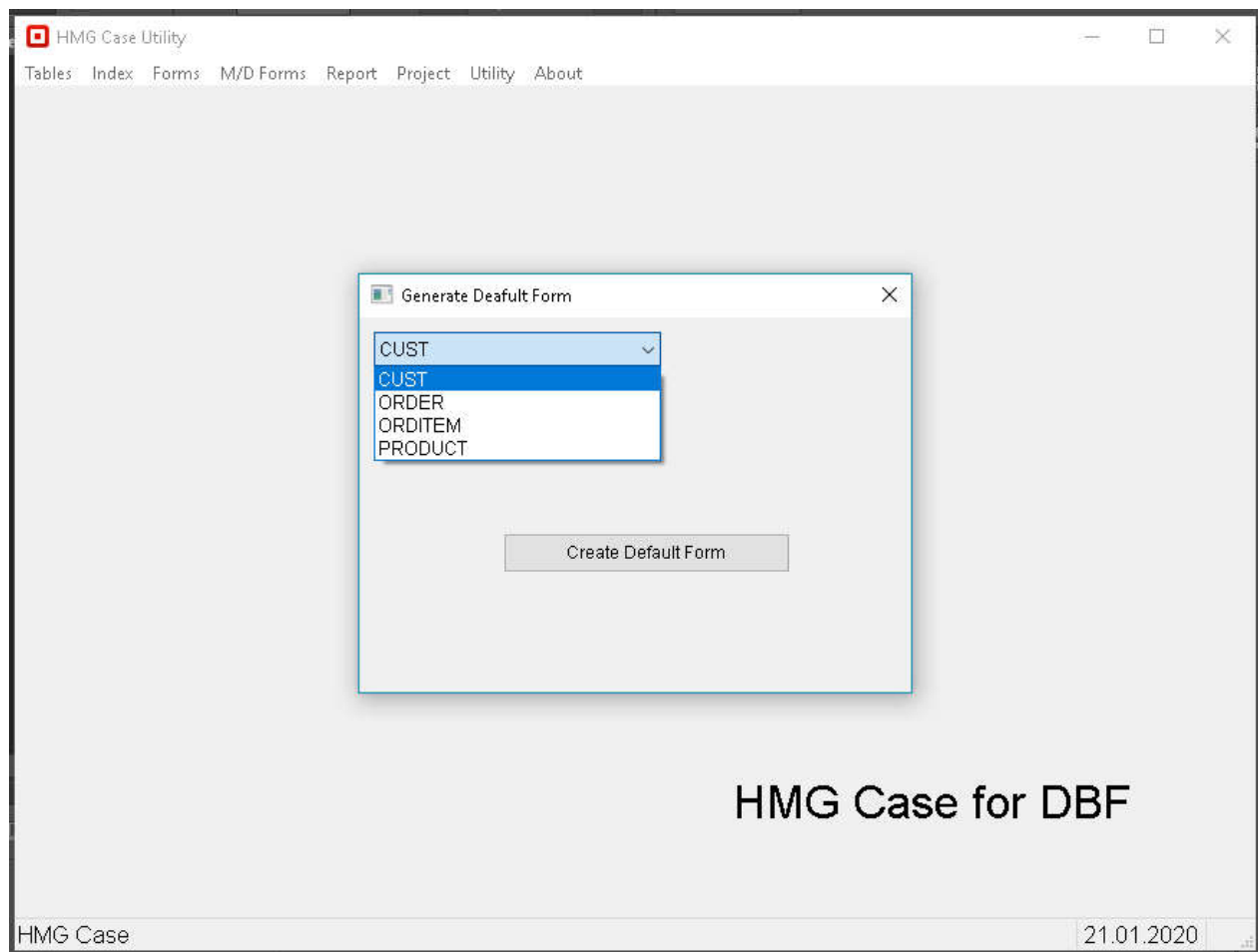


## Forms

Create simple form, one table on screen.

### Default

Just select table and click button Create Deafault Form



If you want quick program, select Forms->Generate and be create edit\_1.prg

Build edit\_1.prg

And see

Table CUST

[F2] Find [F4] Edit [F6] New [F8] Delete [F9] Print [F10] Exit

CUST	NAME
3	KBC BANKA
4	ABRAHAM SUR, KRISTINA ABRAHAM
5	AD STUDIO
6	A-DESIGN P DOO
7	DOO PALIC SUBOTICA U STECAJU
8	AGENCIJA GLADIJATOR
9	AGROVOJVODINA-KOMERCSERVIS
10	AGROZAVOD AD
11	ALPINA YUG DOO
12	AL PACK DOO
14	ALBEY TURIZM TAS. GINA SAN
15	ALCA-TRGOVINA DOO
17	ALF COSMETICS DOO
18	ALFANET SISTEM DOO
19	ALSTAR DOO
20	AMSP DOO
21	APOTEKA SUBOTICA
22	AQUA RIMONA DOO
23	AQUA-MONT
24	ARCUS DOO

CUST: 3

NAME: KBC BANKA

ZIP: 11000

CITY: NOVI BEOGRAD

ADDRESS: OMLADIN. BRIGADA 90V

Save Cancel

Table CUST

It's run program in minute

Look TOOLBAR, have all function for data manipulation: Find, Edit, New, Delete, and finish action with Save or Cancel. No icons, but if copy added icons program have new appearance.

Table CUST

[F2] Find [F4] Edit [F6] New [F8] Delete [F9] Print [F10] Exit

CUST	NAME
3	KBC BANKA
4	ABRAHAM SUR, KRISTINA.ABRAHAM
5	AD STUDIO
6	A-DESIGN P DOO
7	DOO PALIC SUBOTICA U STECAJU
8	AGENCIJA GLADIJATOR
9	AGROVOJVODINA-KOMERCSERVIS
10	AGROZAVOD AD
11	ALPINA YUG DOO
12	AL PACK DOO
14	ALBEY TURIZM TAS.GINA.SAN
15	ALCA-TRGOVINA DOO
17	ALF COSMETICS DOO
18	ALFANET SISTEM DOO
19	ALSTAR DOO
20	AMSP DOO
21	APOTEKA SUBOTICA
22	AQUA RIMONA DOO
23	AQUA-MONT
24	ARCUS DOO

CUST: 3

NAME: KBC BANKA

ZIP: 11000

CITY: NOVI BEOGRAD

ADDRESS: OMLADIN.BRIGADA 90V

Save Cancel

Table CUST

Icons are in BMP, you have use yours.

## Edit

When click this option you can see like this. Left grid are fields, on the right field definition.

The 'Form edit' window displays a table of field definitions on the left and configuration options on the right.

Form	DBF	No	Field Name
CUST	CUST	1	CUST
CUST	CUST	2	NAME
CUST	CUST	3	ZIP
CUST	CUST	4	CITY
CUST	CUST	5	ADDRESS

Grid width: 350 height: 450 Set

Form: CUST  
DBF: CUST  
No: 1  
Field Name: CUST  
Label: CUST  
Field Type: N  
Field Len: 6 Dec:   
Field Row: 100 Col: 520  
Label (relative on field position)  
Row: Col: -100 Set all  
Picture: 999999  
Default: 0

☒ Browse ☐ Display ☐ DBF  
☒ Input ☒ Edit ☐ Key  
☒ Query ☒ Print ☐ Valid  
☐ Sum ☐ Validate ☐ Display

Save Cancel Query Preview form

Select row with Enter or [F4] Edit than  
Ctrl+Up/Ctrl+Down change field position up/down  
Ctrl+Left/Ctrl+Right change field position left/right

Form definition

The 'Preview Form' window shows a visual representation of the form layout. On the left is a large blue rectangular area representing the form body. On the right, the field labels are displayed in orange boxes, corresponding to the definitions in the 'Form edit' window:

- CUST
- NAME
- ZIP
- CITY
- ADDRESS

Button Preview Form display field position on screen.

Note: both window see on Full HD monitor(1920x1080)

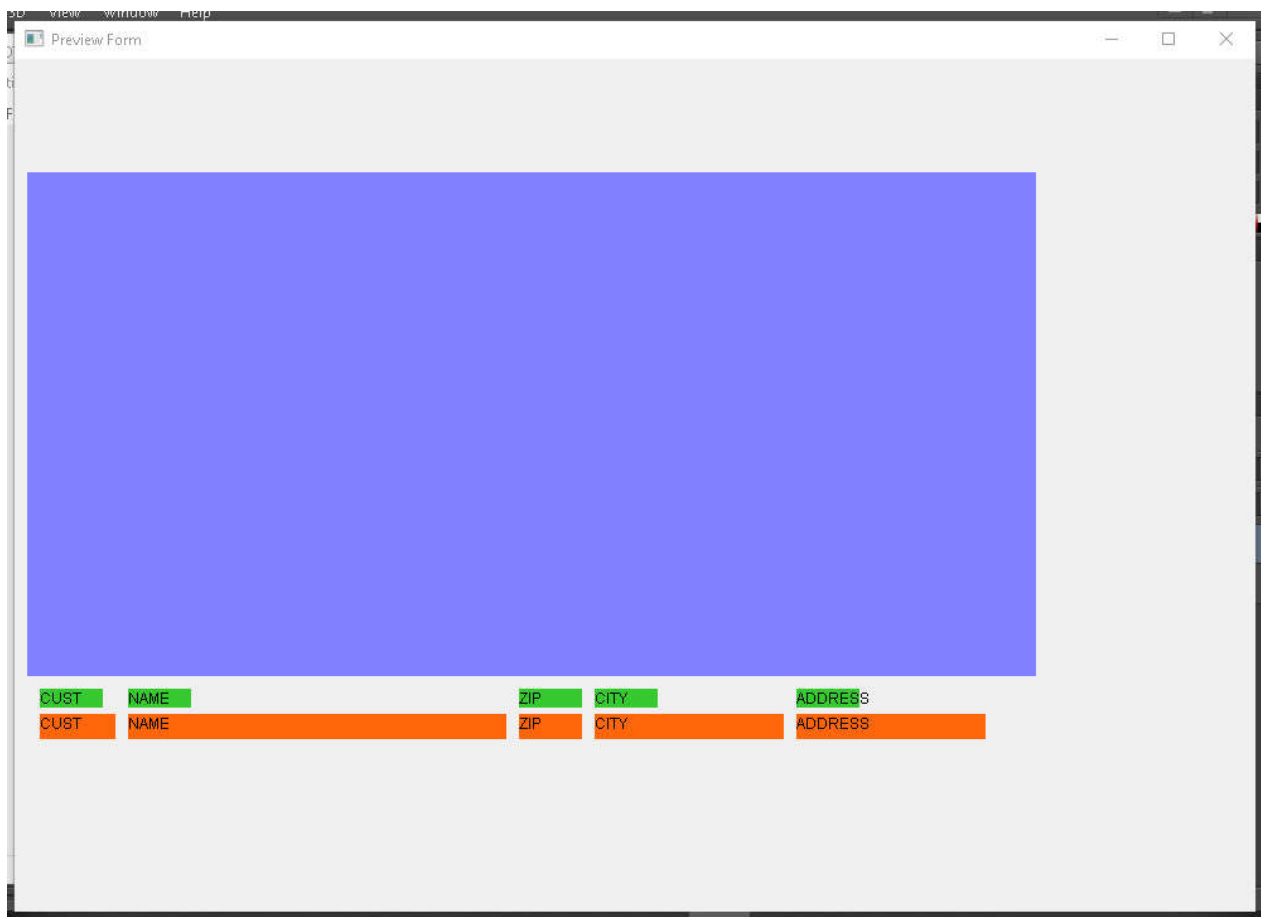
Now you can change grid, top button Set.

For field: you change row and col position, picture and default value. Edit with F4 or Enter. Quick change position with Ctrl + Up/Down (row) and Ctrl+left/Right key (col).

### Field and label position

Label will be display before filed, defined down of field position. Default is 0,-100 that is left from filed.

You can set all labels like -20, 0 is up on the field. This is when you position filed under grid, like



Then program run like

The screenshot shows a window titled "Table CUST" with a toolbar at the top containing icons for Find, Edit, New, Delete, Print, and Exit, each with a corresponding function key (F2-F10). Below the toolbar is a table with 5 columns: CUST, NAME, ZIP, CITY, and ADDRESS. The first row is highlighted in blue. Below the table is a form with input fields for the same 5 columns, with the first row's data pre-filled. At the bottom of the form are "Save" and "Cancel" buttons.

CUST	NAME	ZIP	CITY	ADDRESS
3	KBC BANKA	11000	NOVI BEOGRAD	OMLADIN.BRIGADA 90V
4	ABRAHAM SUR, KRISTINA ABRAHAM	24413	PALIC	HORGOSKI PUT 132
5	AD STUDIO	24000	SUBOTICA	MATKA VUKOVICA 11
6	A-DESIGN P DOO	24000	SUBOTICA	KORZO 6
7	DOO PALIC SUBOTICA U STECAJU	24000	SUBOTICA	DJURE DJAKOVICA 1A
8	AGENCIJA GLADIJATOR	24000	SUBOTICA	KUMICEVA 35
9	AGROVOJVODINA-KOMERCSERVIS	24000	SUBOTICA	ALBE MALAGURSKO...
10	AGROZAVOD AD	24000	SUBOTICA	TRG CARA J.NENADA ...
11	ALPINA YUG DOO	11070	NOVI BEOGRAD	BUL. UMETNOSTI 4
12	AL PACK DOO	24000	SUBOTICA	TOLMINSKA 14
14	ALBEY TURIZM TAS.GINA SAN	99999	YENIYALI MH.	ALI OFLUOGLU TURKI
15	ALCA-TRGOVINA DOO	11272	DOBANOVCI	BEOGRADSKA 7
17	ALF COSMETICS DOO	11080	ZEMUN	RATARSKI PUT 39F
18	ALFANET SISTEM DOO	11000	beograd	SARAJEVSKA 42
19	ALSTAR DOO	24300	BACKA TOPOLA	SALAS 264
20	AMSP DOO	24000	SUBOTICA	BOZE SARCEVICA 44
21	APOTEKA SUBOTICA	24000	SUBOTICA	MATJE GUPCA 26
22	AQUA RIMONA DOO	24000	SUBOTICA	IVE VOJNOVICA 3

CUST	NAME	ZIP	CITY	ADDRESS
3	KBC BANKA	11000	NOVI BEOGRAD	OMLADIN.BRIGADA 90V

Save Cancel

### Insert or delete field

Delete is simple, just press F8 and confirm. It is not necessary for all fields to be displayed.

Insert field, press F6. DBF is \$ (display only), enter field name, type and position. This is simple form, not necessary for this field and no sample use display field.

Attribute field

Browse – is display on grid, with Input and Edit you can enable/disable for Input or Edit value.

When need Sumary set Sum, and sum be display on screen.

Validate – control with List of Value will be explained later

## **Generate**

Just select form and Generate. Next step is compile.

This is simple Form program, one table with grid and all fields on screen.

## **Functions key**

In all created programs Function key are same.

**F2 – Find**, press F2 or click on Find button, enter search criteri and click on Query. Than be display record with select criteria.

**F4 – Edit**

**F6 – New**

**F8 – Delete**

**F9 – Print**

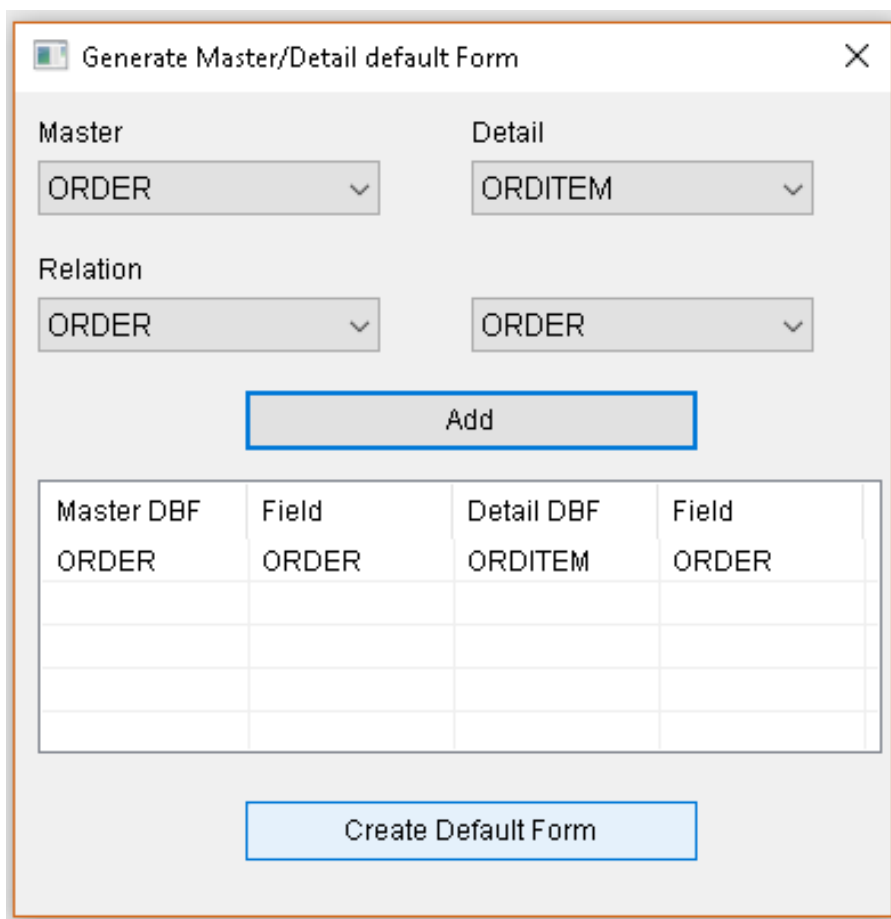
**F10 - Exit**

## M/D Forms

Create Master-Detail Form program, two tables in relations.

### Default

Like simple form, in this case you can select two tables, one master and detail, and relation fields, accept with Add button, and nest filed relation. At end click on Create Default Form.



Master DBF	Field	Detail DBF	Field
ORDER	ORDER	ORDITEM	ORDER

After Generate and compile you can see like





The screenshot shows the 'M/D form edit' window. On the left, a table lists fields for the 'ORDER' form. On the right, the properties for the selected field 'ORDER' are shown. Below the table, there are buttons for 'Save', 'Cancel', 'Query', and 'Preview form'. At the bottom, there is a status bar with the text 'MD form definition'.

Form	Bl...	DBF	No	Field Name
ORDER	1	ORDER	1	ORDER
ORDER	1	ORDER	2	DATUM
ORDER	1	ORDER	3	CUSTOMER
ORDER	1	ORDER	4	NOTE
ORDER	2	ORDITEM	5	ORDER
ORDER	2	ORDITEM	6	PRODUCT
ORDER	2	ORDITEM	7	QTY
ORDER	2	ORDITEM	8	PRICE
ORDER	2	ORDITEM	9	VREDD

Properties for Form: ORDER

Block: 1

DBF: ORDER

No: 1

Field Name: ORDER

Label: ORDER

Field Type: N

Field Len: 6

Field Dec:

Row: 50

Col: 20

Picture: 999999

Default: 0

Options: ☒ Browse, ☒ Input, ☐ Sum, ☐ Display, ☒ Display, ☒ Edit, ☒ Query, ☐ Validate, DBF, Key, Valid, Display

Buttons: Save, Cancel, Query, Preview form

Status: MD form definition

First step, create filed for display names, customer and product.

Insert two field, block 1, CUSTNAME, type C, len 20, position 110,90

And block 2, PRODNAME, type C, len 20, position 130,170

Customer name is table CUST, key CUST, display NAME

Product name is table PRODUCT, key PRODUST, display NAME

M/D form edit

[F4] Edit [F6] New [F8] Delete [F10] Exit

ORDER

Form	Bl...	DBF	No	Field Name
ORDER	1	ORDER	1	ORDER
ORDER	1	ORDER	2	DATUM
ORDER	1	ORDER	3	CUSTOMER
ORDER	1	\$	4	CUSTNAME
ORDER	1	ORDER	5	NOTE
ORDER	2	ORDITEM	6	ORDER
ORDER	2	ORDITEM	7	PRODUCT
ORDER	2	\$	8	PRODNAME
ORDER	2	ORDITEM	9	QTY
ORDER	2	ORDITEM	10	PRICE
ORDER	2	ORDITEM	11	VREDD

Form: ORDER

Block: 1

DBF: ORDER

No: 3

Field Name: CUSTOMER

Label: CUSTOMER

Field Type: N

Field Len: 6

Field Dec:

Row: 110

Col: 20

Picture: 999999

Default: 0

☒ Browse  
☒ Input  
☐ Sum  
☐ Display

☒ Display  
☒ Edit  
☒ Query  
☒ Validate

DBF: CUST  
 Key: CUST  
 Valid: NAME  
 Display: CUSTNAME

Save Cancel Query Preview form

Select row with Enter or [F4] Edit than  
 Ctrl+Up/Ctrl+Down change field position up/down  
 Ctrl+Left/Ctrl+Right cahnge filed position left/right

MD form definition

Also you can select Sum for field VREDD.

Generate and compile. Program now look like

[illegible]

Program can be nicer, you can change HEADER on BROWSE and GRID, and hide some filed in detail table, set WITHS to 0 ( like field ORDER ).

## Generate

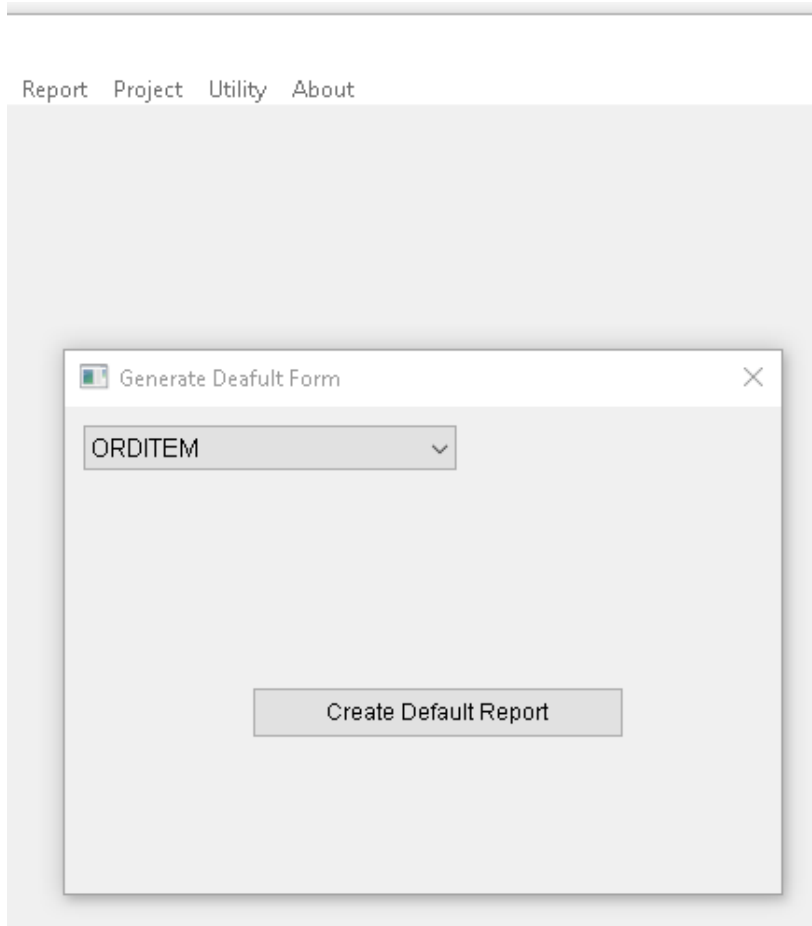
Just select form and Generate. Next step is compile.

This is Master-Detail Form program, one master table with detail table.

# Report

## Default

First step is select table and Create Default Report



## Edit

Next step look like Form Edit

The 'Report's' dialog box contains a table of report definitions and a form for editing the selected report.

Report	DBF	Seq	Name
ORDITEM	ORDITEM	1	ORDER
ORDITEM	ORDITEM	2	PRODUCT
ORDITEM	ORDITEM	3	QTY
ORDITEM	ORDITEM	4	PRICE
ORDITEM	ORDITEM	5	VREDD

Report definition form:

Report: ORDITEM  
DBF: ORDITEM  
Seq: 1  
Name: ORDER  
Type: N  
Len: 6  
Dec: 0  
Picture: 999999  
Header: ORDER  
Width: 6

☒ Print ☐ Break  
☐ Sum on Break ☐ Sum on Report  
☐ Parameter ☐ Not use

Buttons: Save, Cancel, Query

Just generate and look Report.

Than change fields, Header, Picture, Width. If you need SUM of field set **Sum on Report**, if need Group set group filed (in this case ORDER), and **Sum on Break** . Generate and compile.

Now report look like (last page)

Date : 24.01.2020

TITLE of Report

Page : 65

ORDER	PRODUC	QTY	PRICE	VREDD
462	700051	4.000	302.00	1208.00
	13782	4.000	129.00	516.00
	21696	6.000	95.00	570.00
	868365	12.000	114.50	1374.00
	120313	6.000	101.50	609.00
	120413	6.000	88.00	528.00
	120176	6.000	85.50	513.00
	23619	6.000	75.50	453.00
	210293	3.000	1270.00	3810.00
	72206	4.000	885.25	3541.00
	14279	12.000	139.60	1675.20
*****				
sum				23484.70
				<b>5355301.70</b>

## Generate

When field defined just Generate and Compile.

## Parameters

Report usually need parameters, this is for create param.prg then insert in report

Insert field and press F9 Build than create param.prg

[illegible]

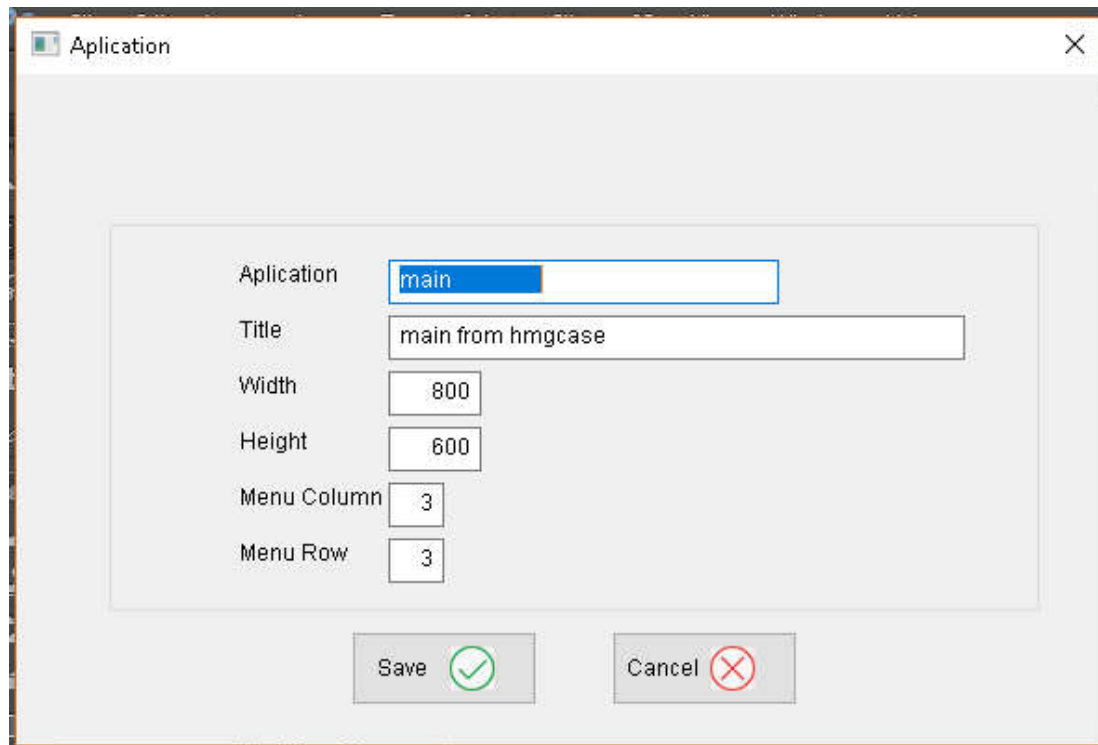


## Project

### Aplication

If the program has more features / options then it probably has a menu that will display it in a nicer way

Here you choose what the app is called, the title, the size of the window and how many columns and rows there are



The image shows a dialog box titled "Aplication" with a close button (X) in the top right corner. The dialog contains a form with the following fields:

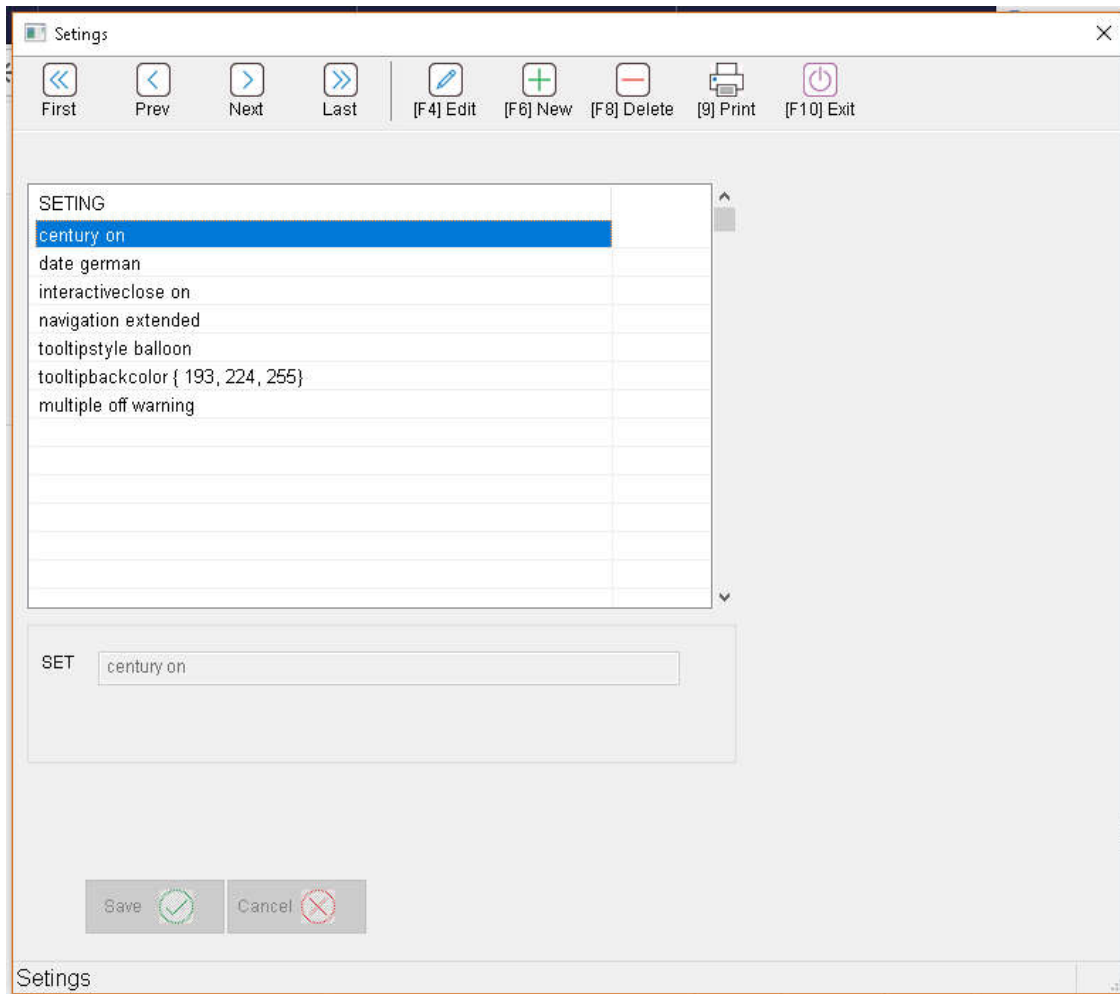
- Aplication:** A text input field containing the word "main".
- Title:** A text input field containing the text "main from hmgcase".
- Width:** A numeric input field containing the value "800".
- Height:** A numeric input field containing the value "600".
- Menu Column:** A numeric input field containing the value "3".
- Menu Row:** A numeric input field containing the value "3".

At the bottom of the dialog, there are two buttons: "Save" with a green checkmark icon and "Cancel" with a red X icon.

## Setting

Each program has its default settings at the beginning of the program

You can define it here



## Menu

The next step is to define the names of the columns and rows in the menu

level 0 is basic, columns

then define the column, row

item: name

action: function, procedure

module: program

if you have common features you can add it to the right handbar, the programs you specify will be added to the .hbp file

Application menu

[F4] Edit [F6] New [F8] Delete [F10] Exit

(1)	(2)	ITEM	ACTION	MODUL
0	1	Menu 1		
0	2	Menu 2		
0	3	Menu 3		
1	1	Item 1 1	nil	
1	2	Item 1 2	nil	
1	3	Item 1 3	nil	
1	4	.	nil	
1	5	Exit	MainForm.Release	
2	1	Item 2 1	nil	
2	2	Item 2 2	nil	
2	3	Item 2 3	nil	
3	1	Item 3 1	nil	

L1 L2 ITEM ACTION MODUL

0 1 Menu 1

MODUL+ to .HBP

open\_dbf  
open\_ntx  
use\_dbf

MODUL

Save Cancel

Save Cancel

Menu

## Submenu

If you need more menu item, this option can define.

Application menus/submenus

[F4] Edit [F6] New [F8] Delete [F10] Exit

(3)	NO	ITEM	ACTION	MODUL
100	1	one	nil	
100	2	two	nil	
200	1	three	nil	
200	2	four	nil	

(3)	NO	ITEM	ACTION	MODUL
100	1	one	nil	

Save Cancel

## Generate

When menu defined next step is Generate, result is main.prg and main.hbp (main je application name which you defined in Project->Application)

## Make Install

If you want create install package with InnoSetup ( <https://www.jrsoftware.org/isinfo.php> ) this option help to create .iss file

## Prepare generated program for menu

Programs were generated to work on standalone, only compilation needed. When they are part of an application and are called through the menu then some changes need to be made.

Two changes need to be made, the added programs were added with the SET PROCEDURE command and this should be excluded, the following is that only one WINDOW in the program can be MAIN, should be changed to MODAL.

```
#include <hmg.ch>
```

```
PROCEDURE MAIN // for test, usually edit_CUST
```

```
    PUBLIC NewRec := .F., EditRec := .F., FindRec := .F., FiltRec := .F., _qry_exp := ""
```

```
    set navigation extended  
    set deleted on
```

```
    set date german  
    set century on
```

```
    set procedure to open_dbf // for test <<<  
    set procedure to open_ntx // for test <<<  
    set procedure to Use_dbf // for test <<<
```

```
    open_dbf()  
    open_ntx()
```

```
    set procedure to sbr_low // for test <<<
```

```
    open_2357()
```

```
    DEFINE WINDOW Win_1 ;  
        AT 0,0 ;  
        WIDTH 1000 ;  
        HEIGHT 700 ;  
        TITLE "Table CUST" ;  
        MAIN ; // for test, usually MODAL ; <<<  
        ON RELEASE dbclosesall() ;  
        BACKCOLOR { 230, 230, 230 }
```

## Utility

Some usefull functions

### List on functions

Create list of functions in all programs

### List of pictures

Create list of pictures in programs and create .rc file