

**CREATION OF DIGITAL LIBRARIES
IN CD-ROMs USING *WINISIS* AND *GENISIS*CD**

K Rajasekharan & Nafala K M

*In consultation with
Stephen O'Brien, David Storti, Prof A Neelmeghan etc*

**Library & Information Division
Kerala Institute of Local Administration**

Mulagunnathu Kavu – 680 581, Thrissur, India
Email: librarianskila@hotmail.com

CREATION OF DIGITAL LIBRARY USING *WINISIS* & *GENISIS*CD

Creation of a searchable collection of full text documents on a cd-rom

Winisis, window version of the CDS/ISIS software of Unesco originally developed for creation of cataloguing (bibliographic) database, allows us to develop searchable digital library of fulltext documents. *GenisisCD*, another free software, offers simple way to convert the *winisis* database into a cd-rom. You can create a digital library of full text documents in a cd-rom using both the soft ware.

Winisis has an inbuilt provision for creating a hyperlink, in a field and the hyperlink can be linked to any full text document, by appropriate command in the print format. A click on the hypertext link, of the database thus generated, will result in opening the linked document automatically. That means you can create a database of a digital collection, which displays a hyper link on one field and by clicking on the link in the field, you can open the appropriate full text document automatically. This is made possible by adding a command ‘link.... ...OPENFILE’ in the print format. If you burn the resultant application along with the full text documents at the appropriate folder, it would have the features of a digital library.

How to create the database, of digital collection of documents, using *Winisis*?

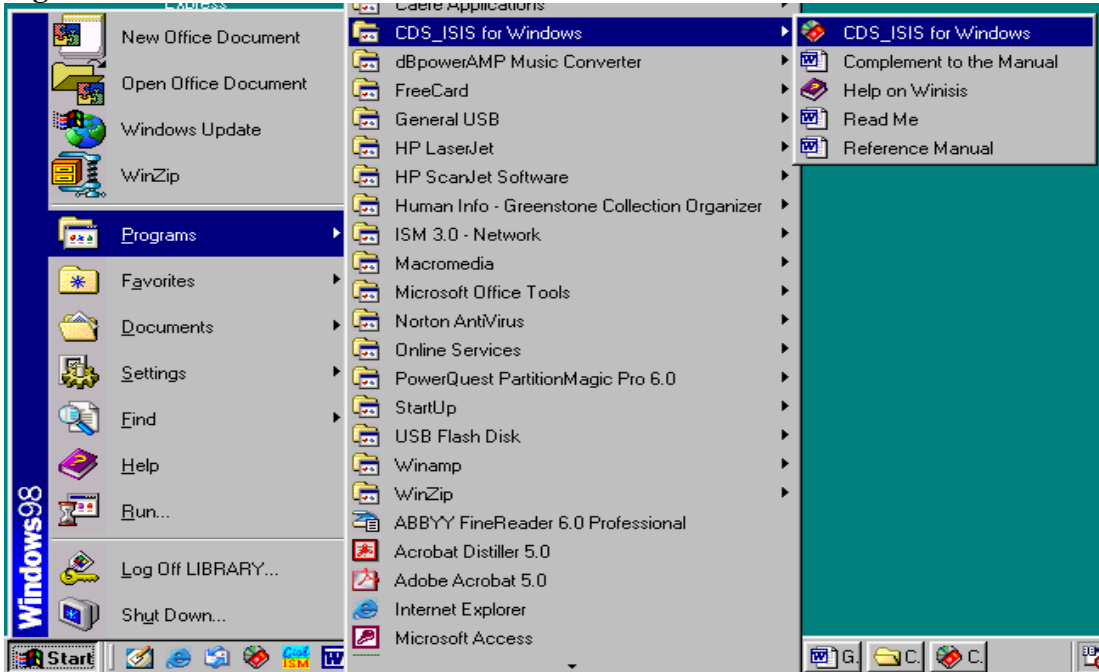
In order to create a sample digital library, you need to have the few full text documents in your computer. Create a database of the above digital documents in *Winisis*. The database can have any number of fields. For explaining the steps, we take a sample database with the following fields.

- 10 Author
- 20 Title
- 30 Keywords
- 40 Source

Creation of Database Using Winisis

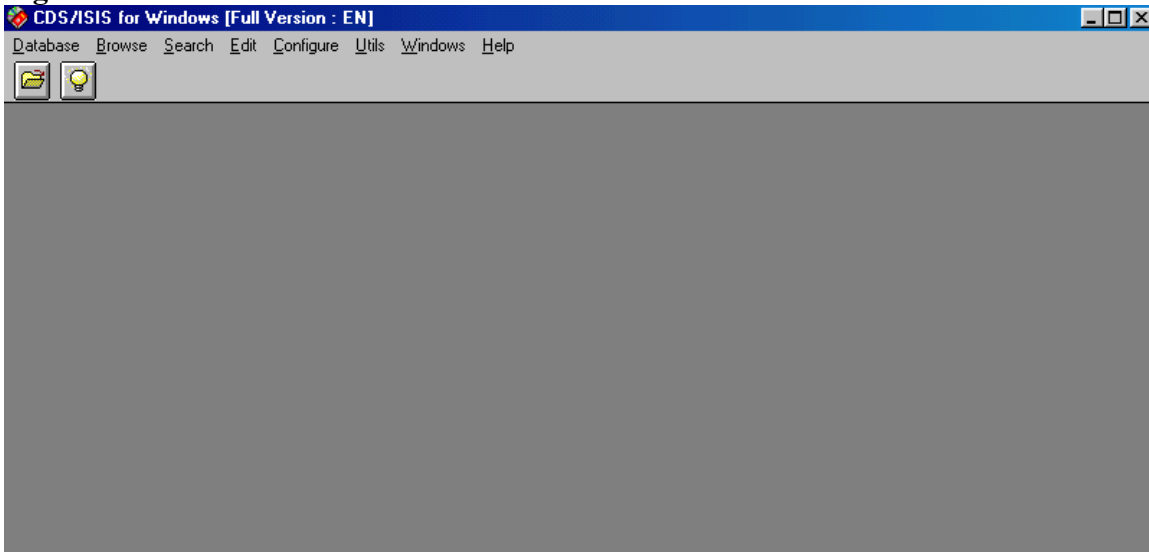
Creation of database by using Winisis is very easy and automatic. Open the CDS_ISIS for Windows as follows:-

Figure 1



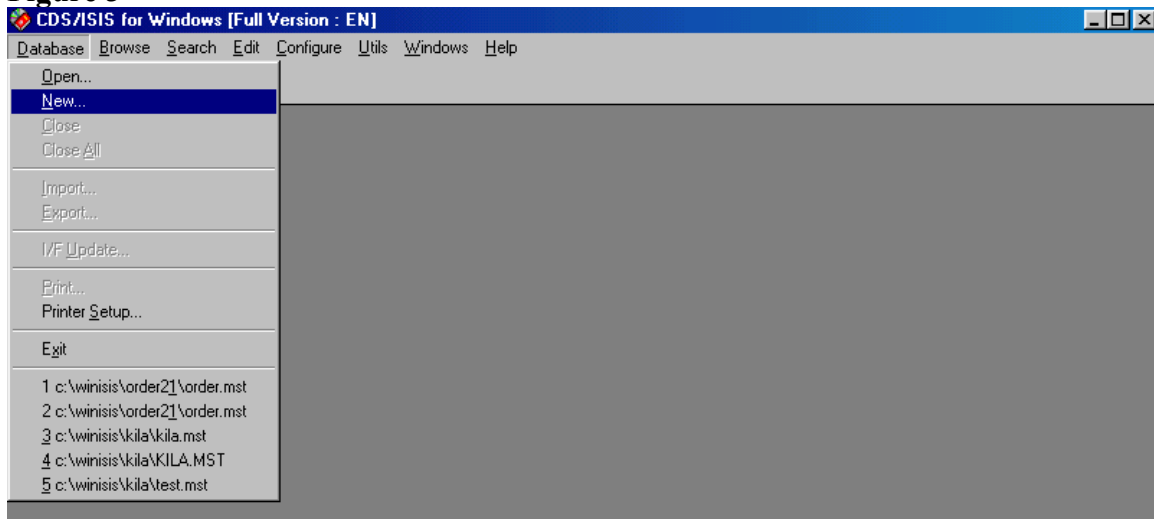
Then you will get the following screen

Figure 2



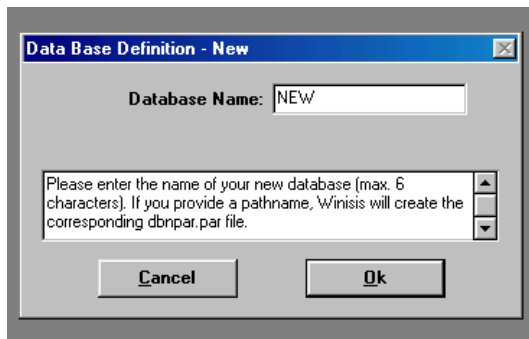
Then click on **Database** drop down menu and select **New** as follows:-

Figure 3



You will be lead to the following screen:-

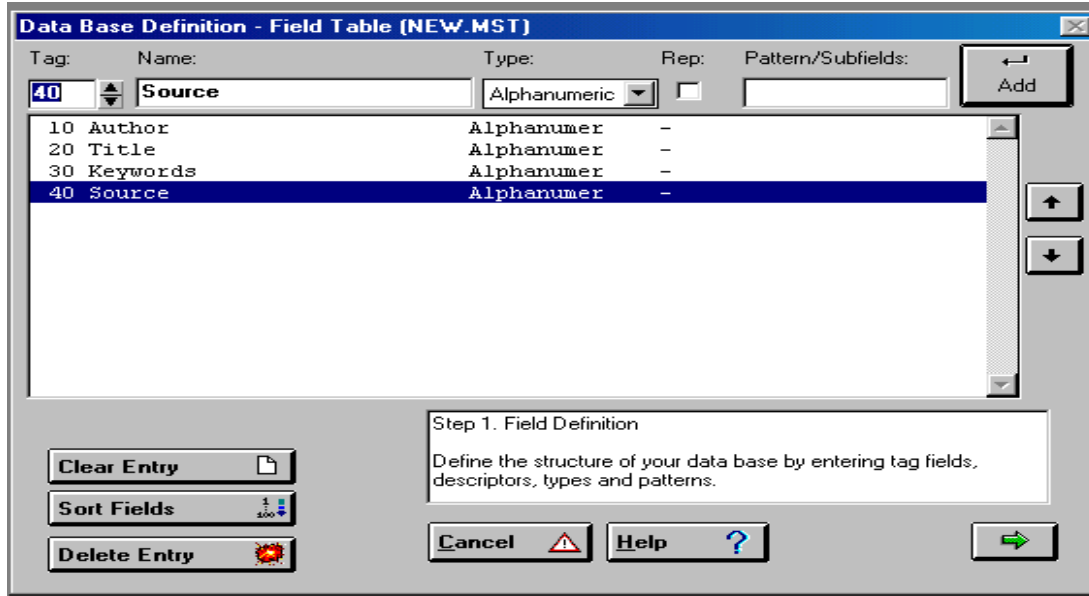
Figure 4



Then give a new database name and click on **Ok** button you will get the following screen.

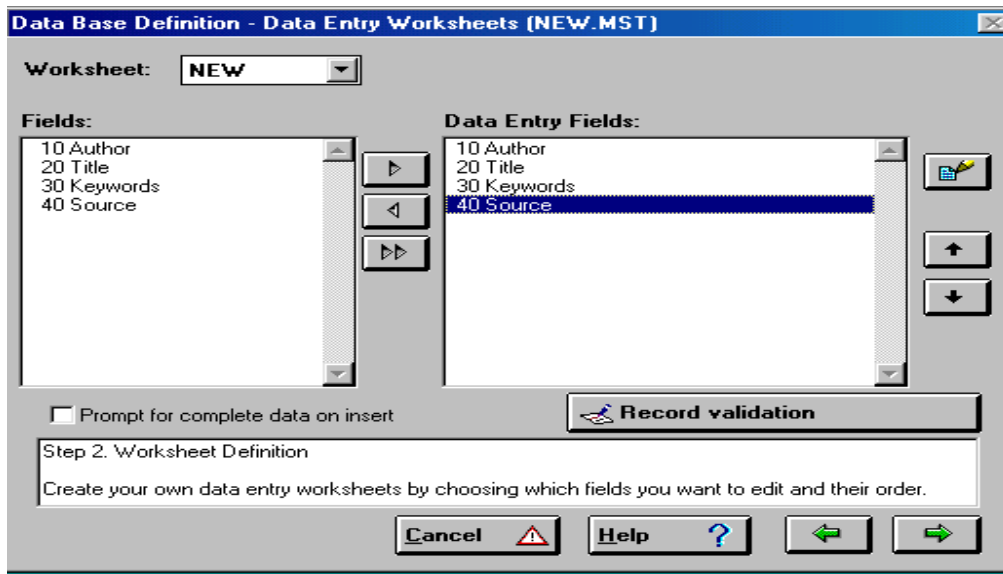
To start with, you need to provide the **Tag number** (10, 20, etc) and **Field name** (Author, Title etc) of your choice and click **Add** button every time on completion of each entry.

Figure 5 Field Definition Table



On entering the tag and the name of Fields, click the **arrow button** at the right bottom corner to move on to the next screenshot in which you can choose the **Data Entry Fields** that need to appear in the data entry worksheet by selecting the **Field Name** on the right pane and then clicking the **side arrow** key as in Figure 6.

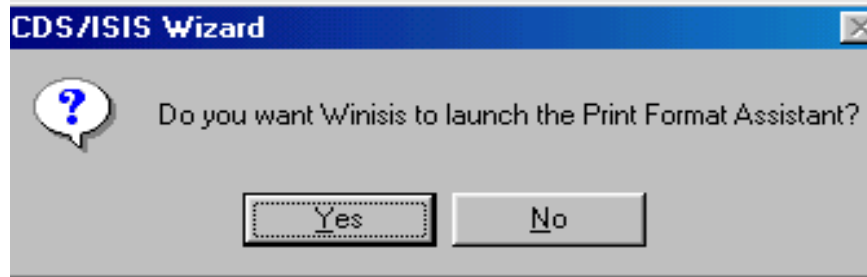
Figure 6 Data Entry Worksheet



In the above screen highlight the fields (in the left pane), which you want to include as the Data Entry Field and click on the side arrow button so as to get it included as a Data Entry Field. If you click double arrow button above all fields will be selected as Data

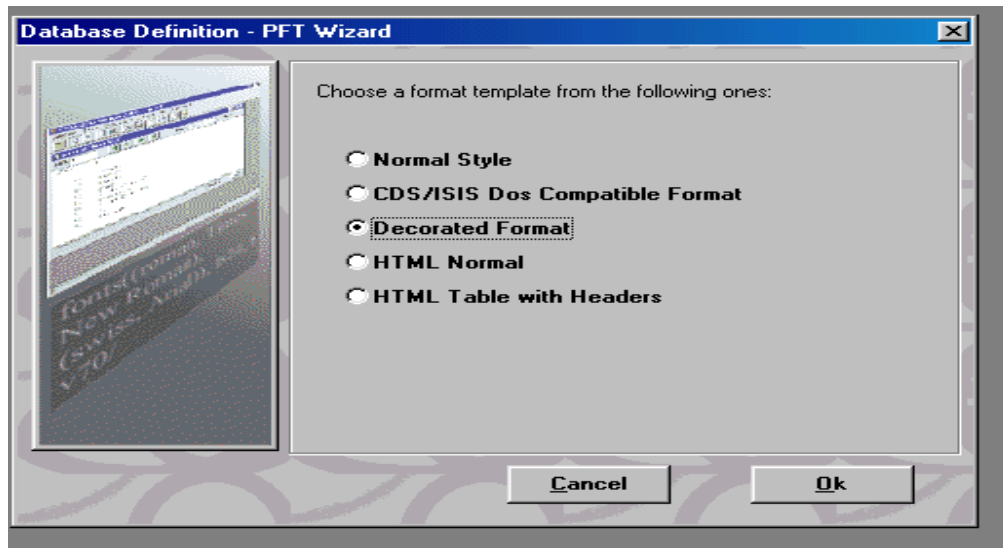
Entry Fields and will appear in the right pane above. Then click on the **green arrow** button to move on to get the following screen.

Figure 7



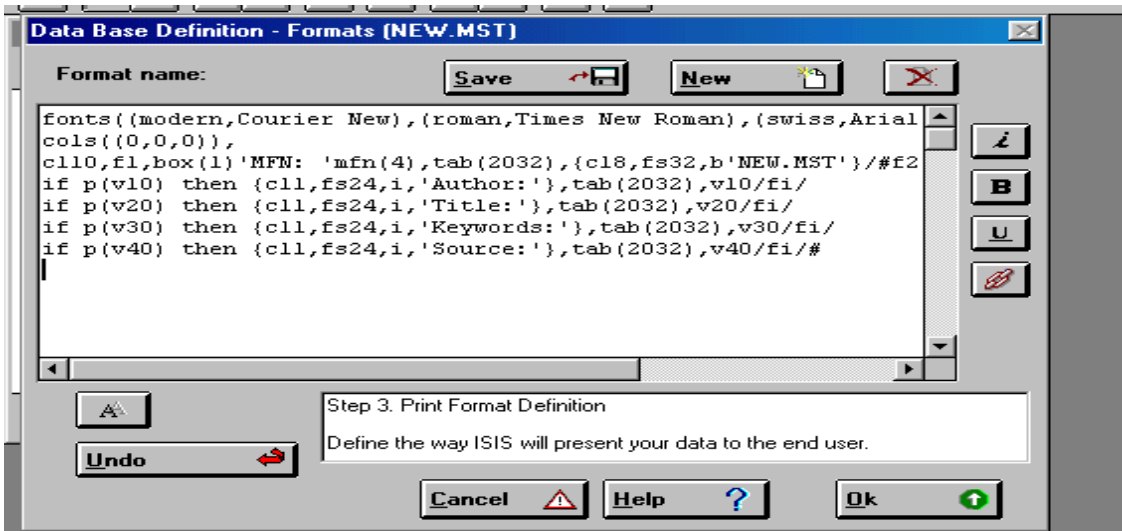
Then Click **yes** to launch Print Format Assistant

Figure 8



Then select the appropriate print format and click **OK** button to get the print format screen as in Fig 9.

Figure 9 Print Format



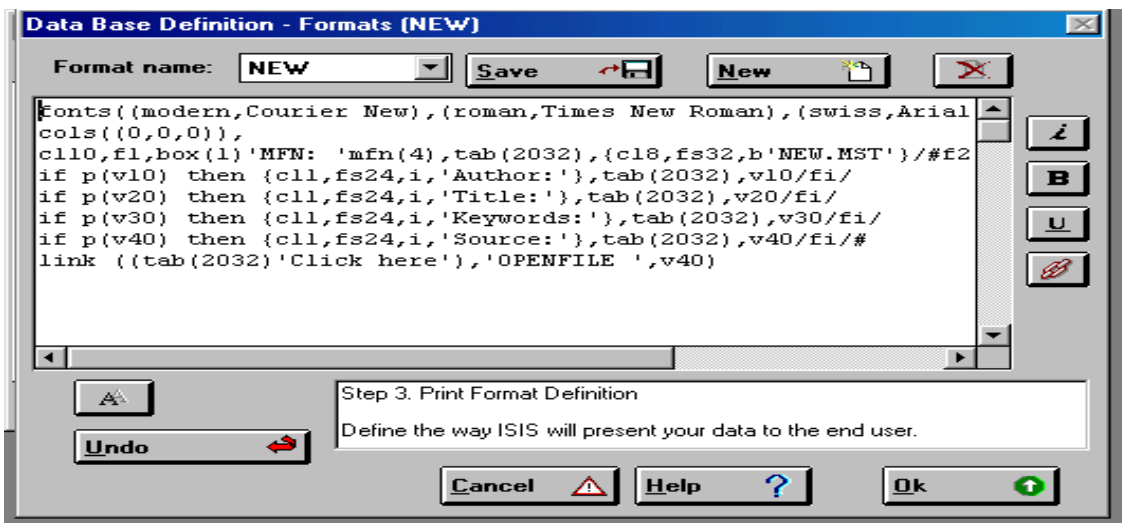
In the print format lines, you may add the following formatting line in order to create a hypertext link with the words **Click Here** that will be linked to the full text document, provided in the **tag 40** – the **Source**.

Link (('Click here'), 'OPENFILE ', v40)

Ensure that there must be a space between the OPENFILE command and the single quote, and the command OPENFILE should be written in upper case as shown above. The command means that, when you click on the **'Click here'** link, the click will automatically result in opening the file denoted in the field v40, in a new window

The resultant print format would appear as in Figure 10.

Figure 10



The print format of the above database is as follows:-

```
fonts((modern,Courier New),(roman,Times New Roman),(swiss,Arial)), cols((0,0,0)),
cl10,f1,box(1)'MFN: 'mfn(4),tab(2032),{cl8,fs32,b'NEW.MST'}/#f2,cl4,m(2032,-
2032),cl4,fs30,
if p(v10) then {cl1,fs24,i,'Author:'},tab(2032),v10/fi/
if p(v20) then {cl1,fs24,i,'Title:'},tab(2032),v20/fi/
if p(v30) then {cl1,fs24,i,'Keywords:'},tab(2032),v30/fi/
if p(v40) then {cl1,fs24,i,'Source:'},tab(2032),v40/fi/
link ((tab(2032)'Click here'),'OPENFILE ',v40)
```

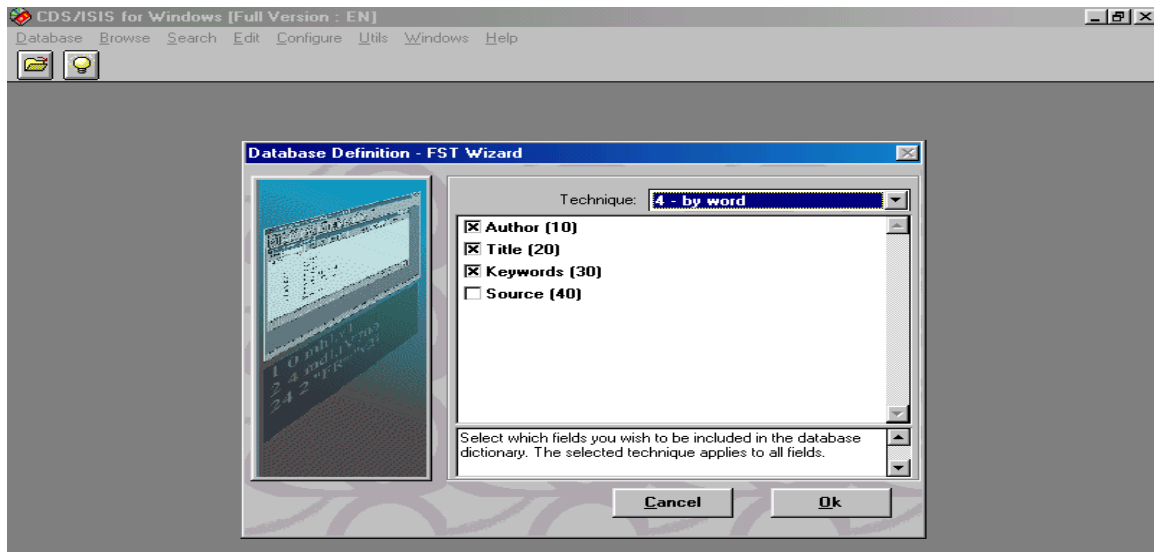
Click **Ok** button to move ahead and you will be asked whether to launch the Dictionary Assistant.

Figure 11



Then Click **yes** to launch the Dictionary Assistant. You will then get the following screen

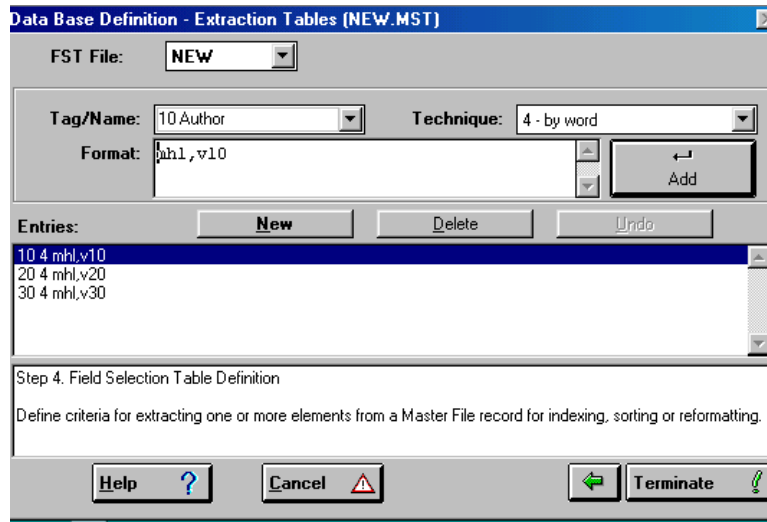
Figure 12 Field Selection Table



Then click **ok** button to move to the next and you may choose the indexing technique in the **Field Selection Table** as Figure 12.

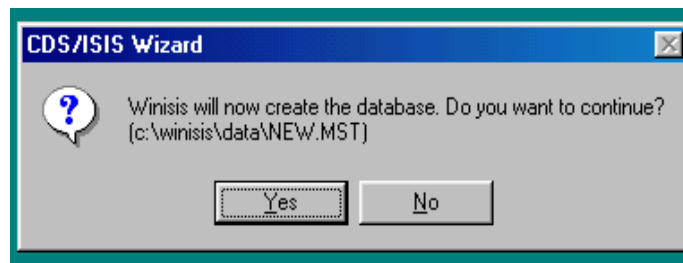
Put **x** mark in the **check boxes** on the left side of the field names and select the appropriate **Technique** for indexing from the dropdown menu at the right top. If you need word-by-word indexing, select **4 by word** in the drop down menu. Then Click **Ok** to move to the next.

Figure 13



Here you can change the indexing technique. If you need to correct any entry, just click on the entry in the entry box and that will appear in the editing box for editing. Then click **Terminate** button you will get the following message.

Figure 14



Then click **yes** for confirmation and you will be notified that database has been created.

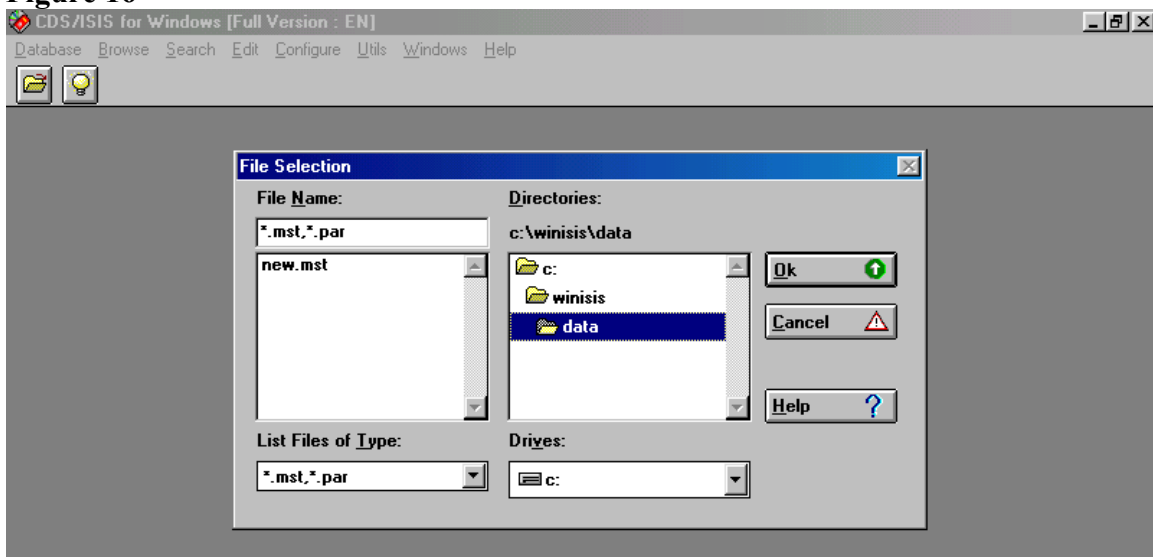
Figure 15



Click **OK** button.

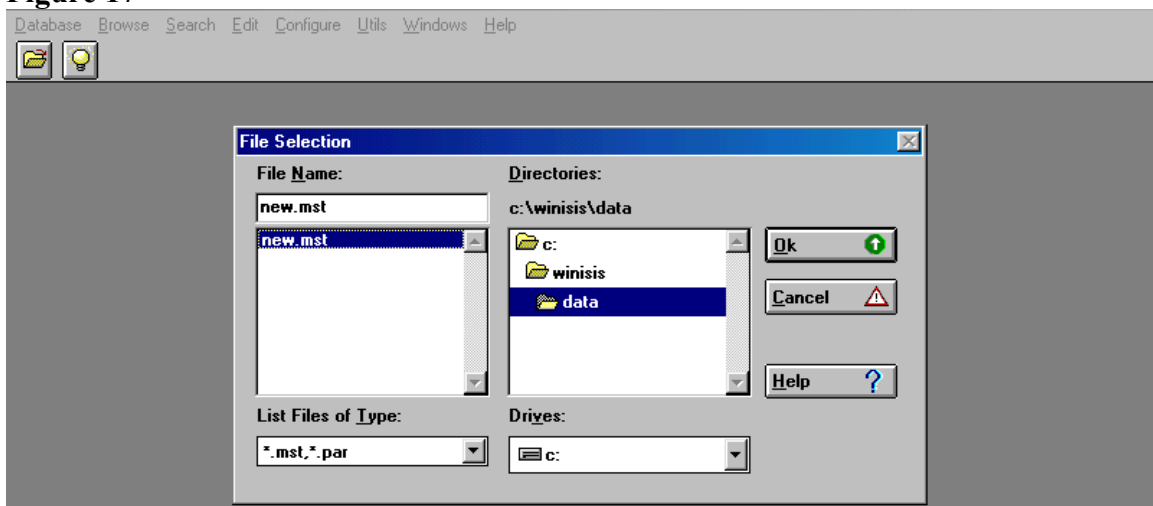
Now creation of the database is over.

Figure 16



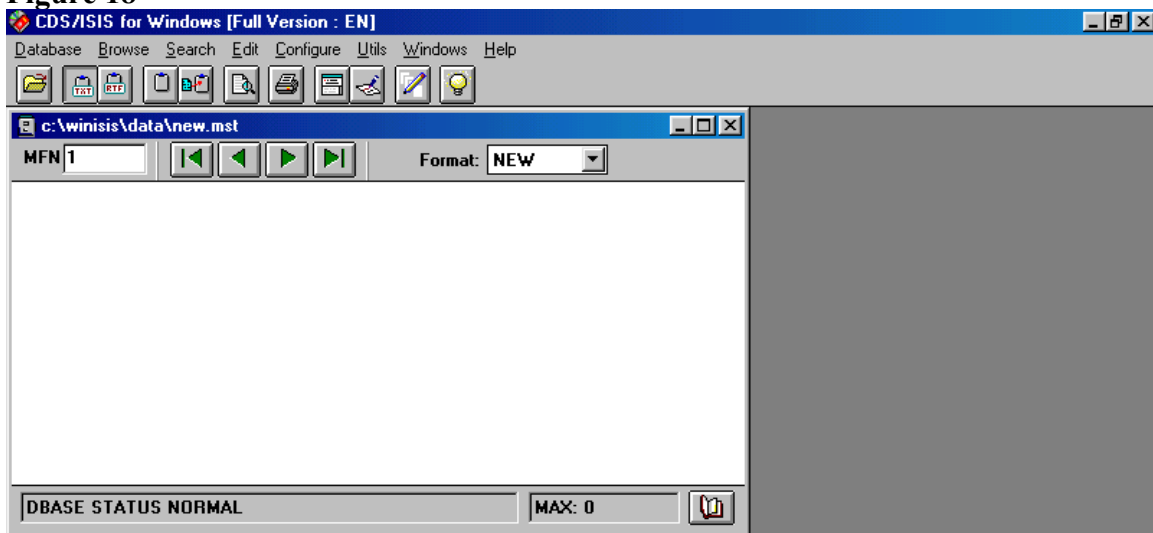
Then select **.mst** file of the new database (new.mst in our case)

Figure 17



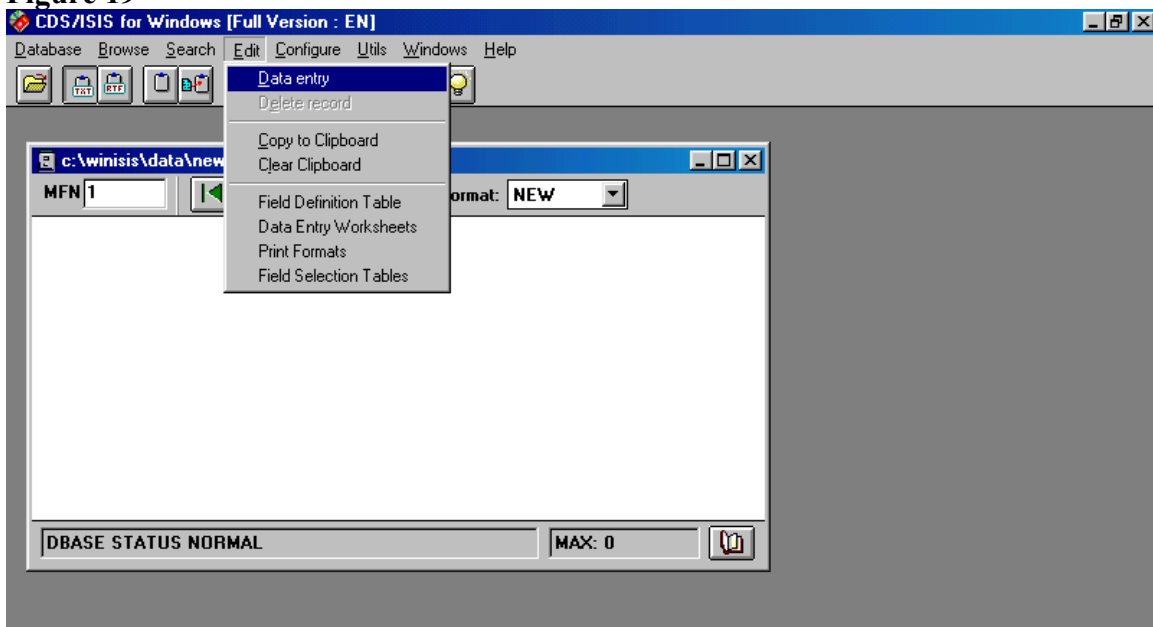
Click **OK** button to get the following screen.

Figure 18



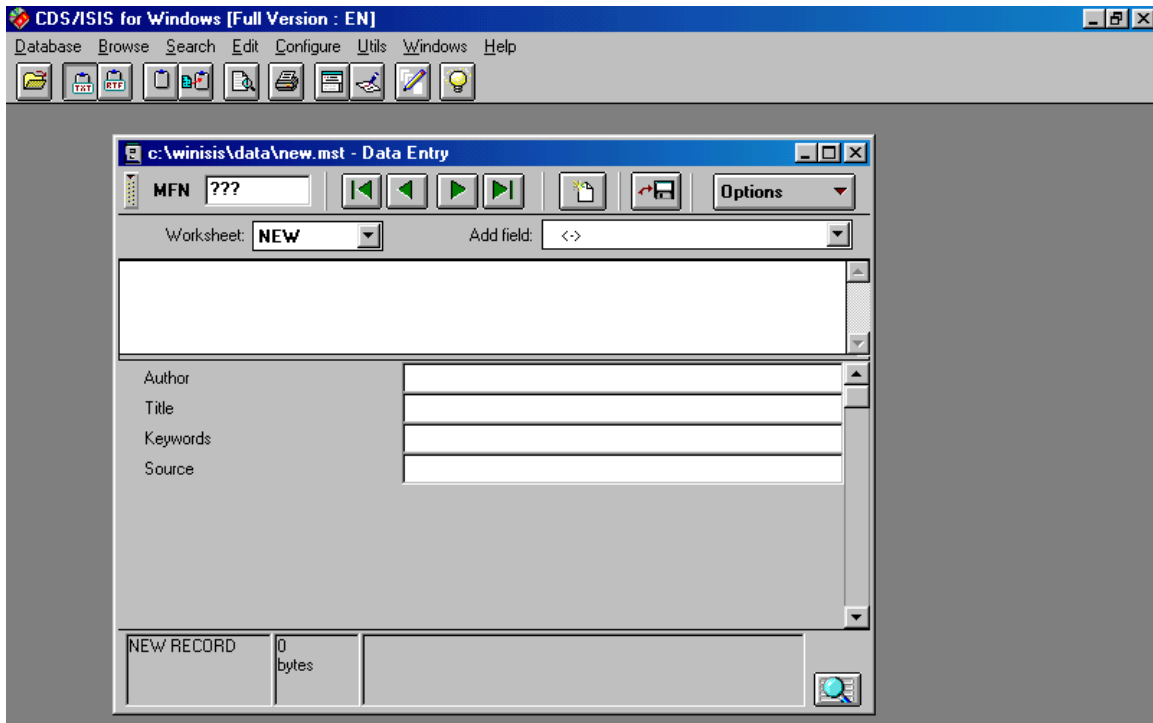
Now creation of the database is over and you need to enter the data by opening the Winisis as in Fig 16 and clicking the **Data entry** under **Edit** menu.

Figure 19



Then you will get the following screen in Figure 20.

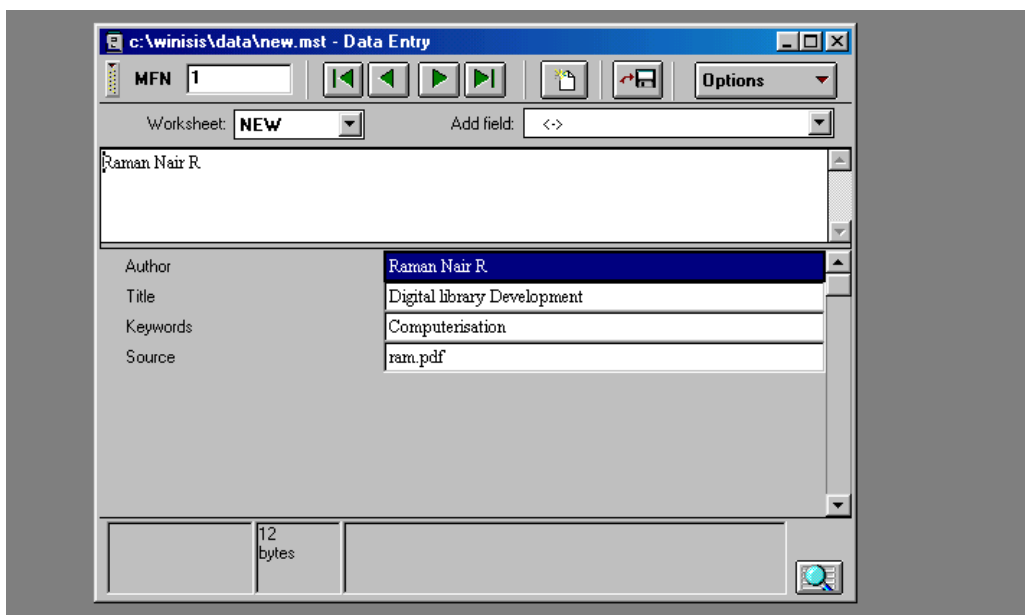
Figure 20 Data Entry Window



Entering *Data* in the Database

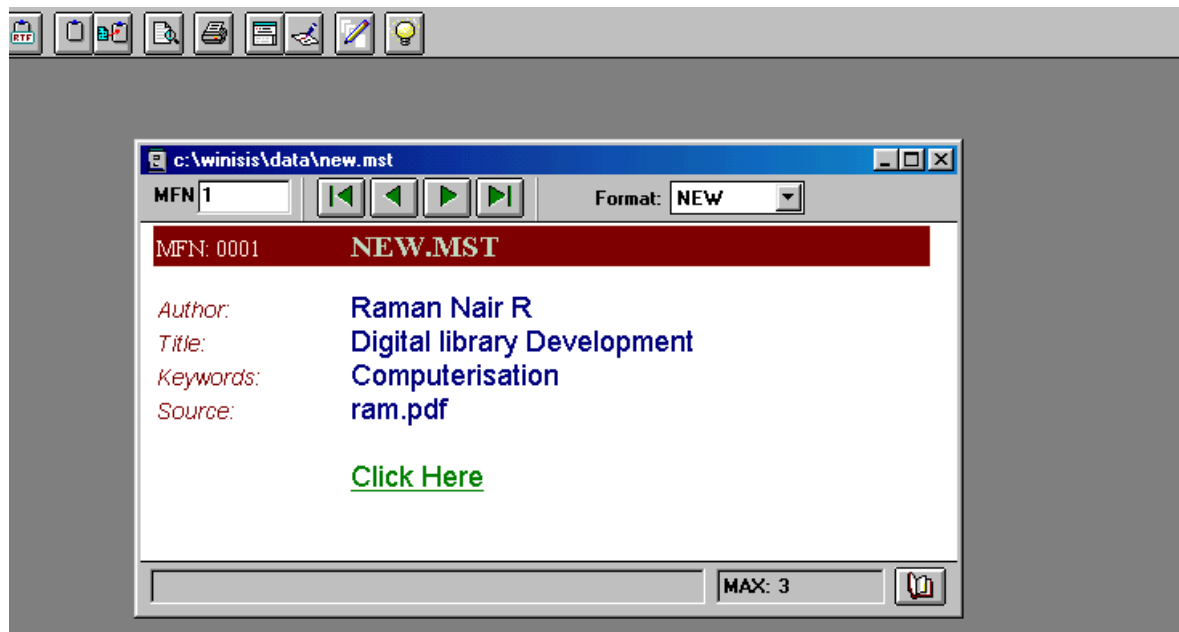
Enter the data of all documents of the digital collection. The document name of the fulltext documents including extension (.pdf, .doc etc.) should be entered in the **Source** field.

Figure 21



The display of the resultant database will be as follows.

Figure 22



NB:- If you put full path of the document in Source field and place that document in that location in the computer, a click on the link will automatically open the document. But if you want to burn the program into a cd-rom using genisisCD, you need to provide document name alone (ram.pdf) as above if your newly burned cd-rom need to work properly.)

Making winisis database into a self installing CD-ROM

Installation of the GenisisCD

Download the genisisCD program from the Unesco website and unzip the file. When You unzip the downloaded zipped file; you will get the following three files



Then, double click on **setup.exe** file as above

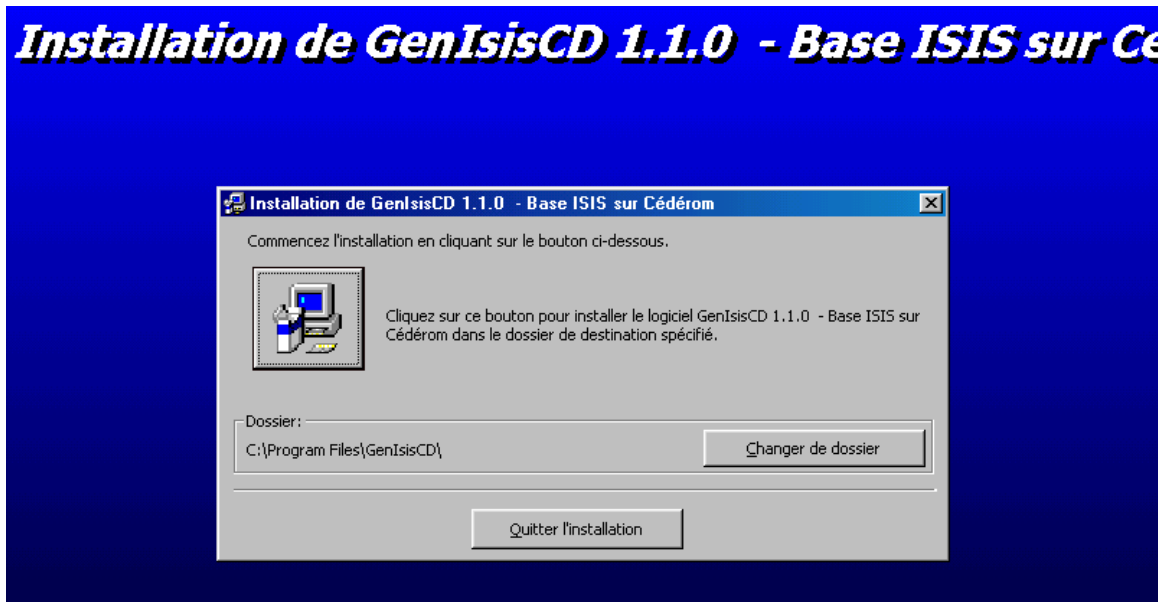
Then you will get the first screen in the installation process as follows: -

Figure 23



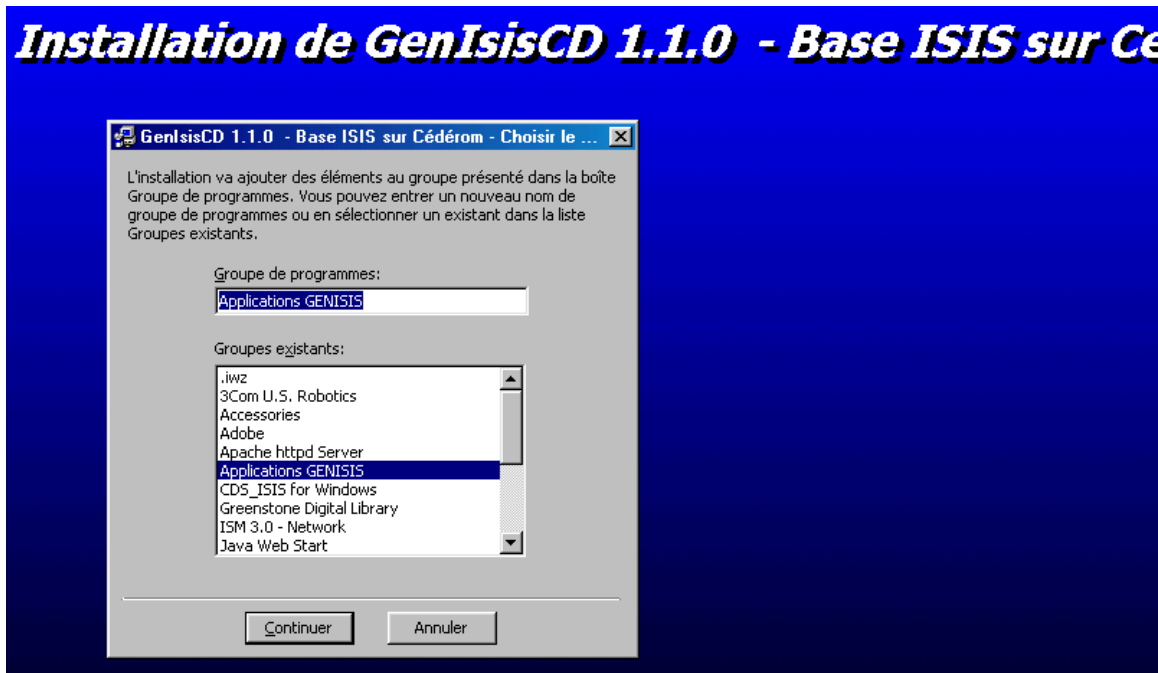
Click on the **OK** button and you will be lead to a screen as in Figure 23 as follows: -

Figure 24



Click on the **icon on the left side** and you will get the following screen: -

Figure 25

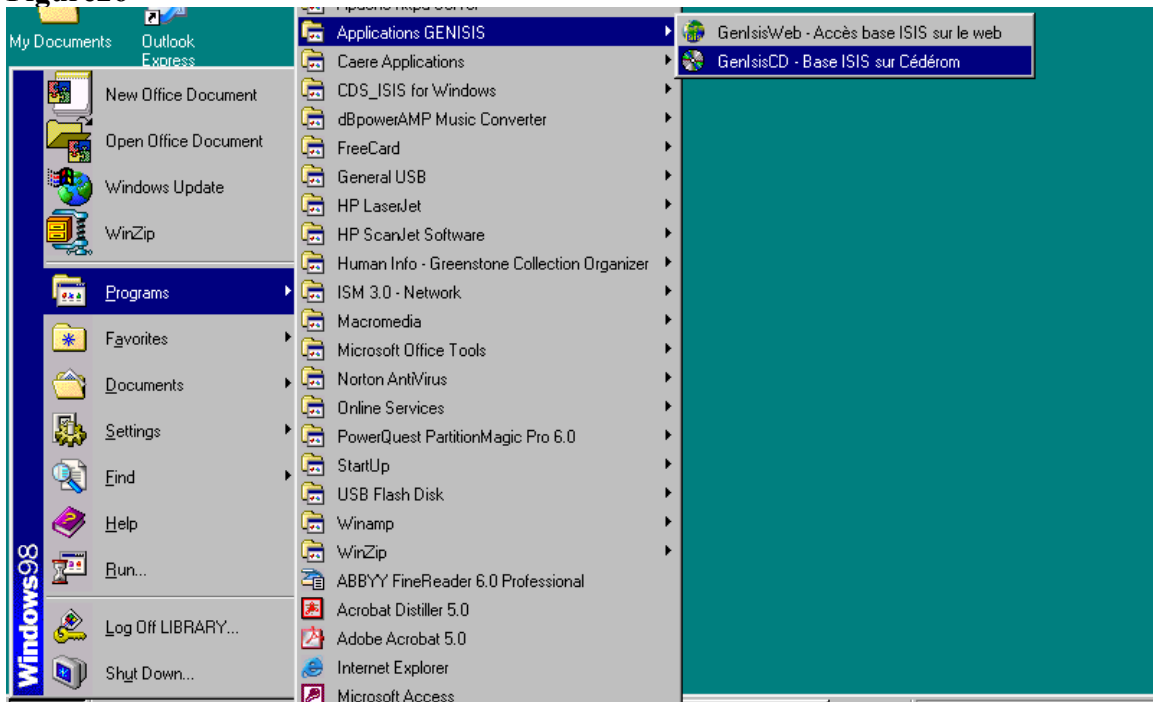


Then click on the continue button and you will be notified of the successful installation of the program. Then click on the **OK** button to finalize the installation.

Creating the set of files by using genisisCD, for burning the cd-rom

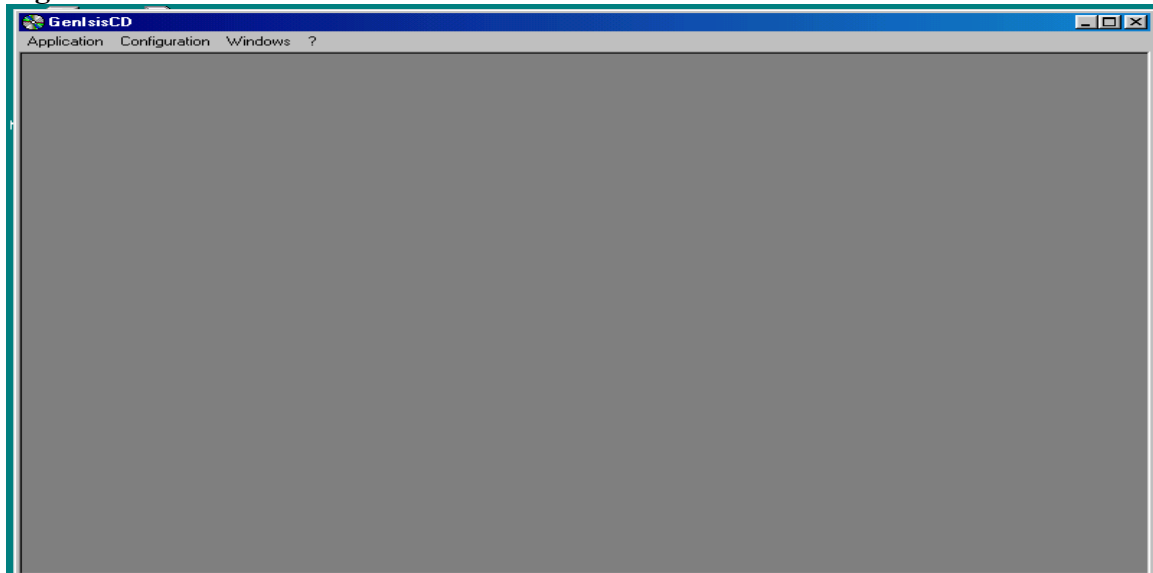
To start genisisCD program, go to **Start\Programs\Applications Genisis\GenisisCD-Base ISIS** as follows:-

Figure26



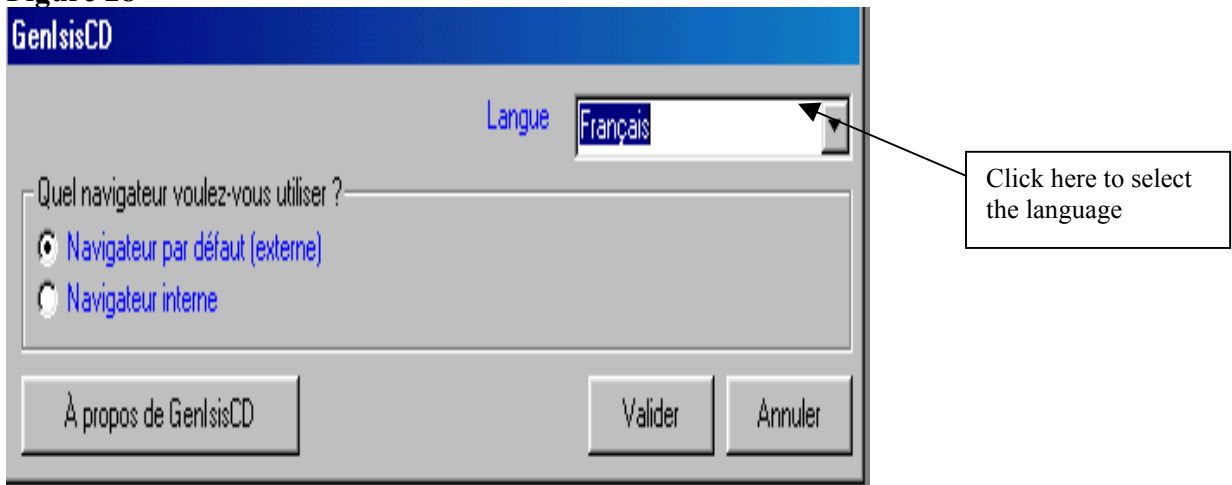
Then you will get the following screen in Figure 27

Figure 27



Then click **Configuration** menu and selection **Options** you will get the following screen.

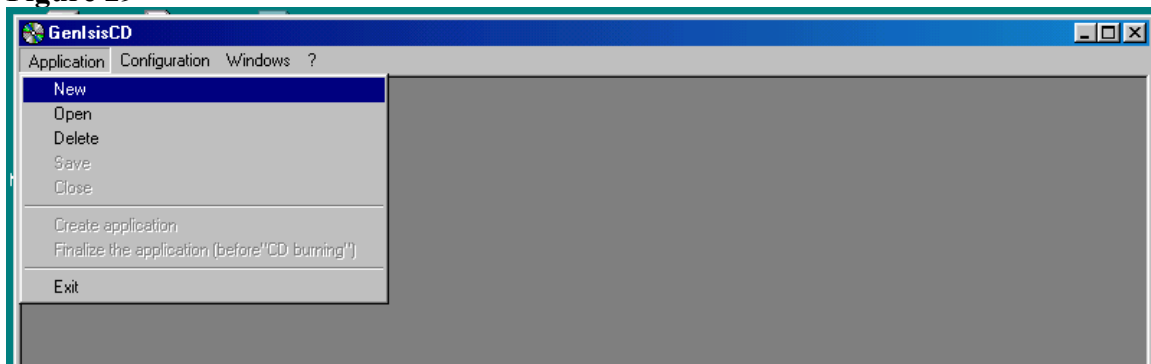
Figure 28



In the above screen **click** on the language drop down arrow key and select the language **English**.

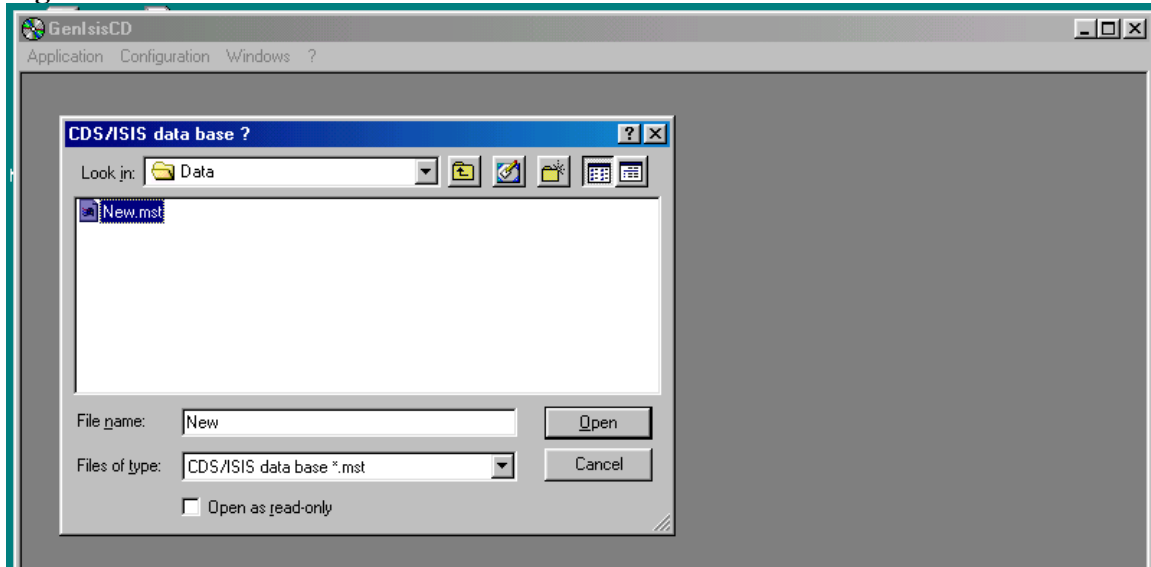
Then click on **Application** menu and select **new** as follows.

Figure 29



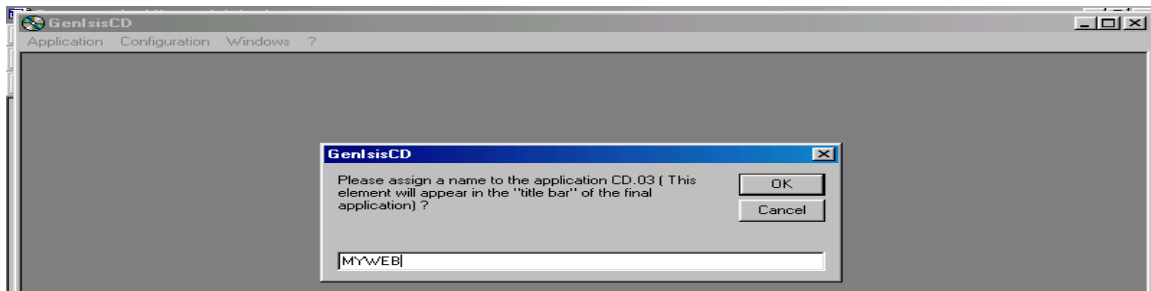
Then the following screen will appear.

Figure 30



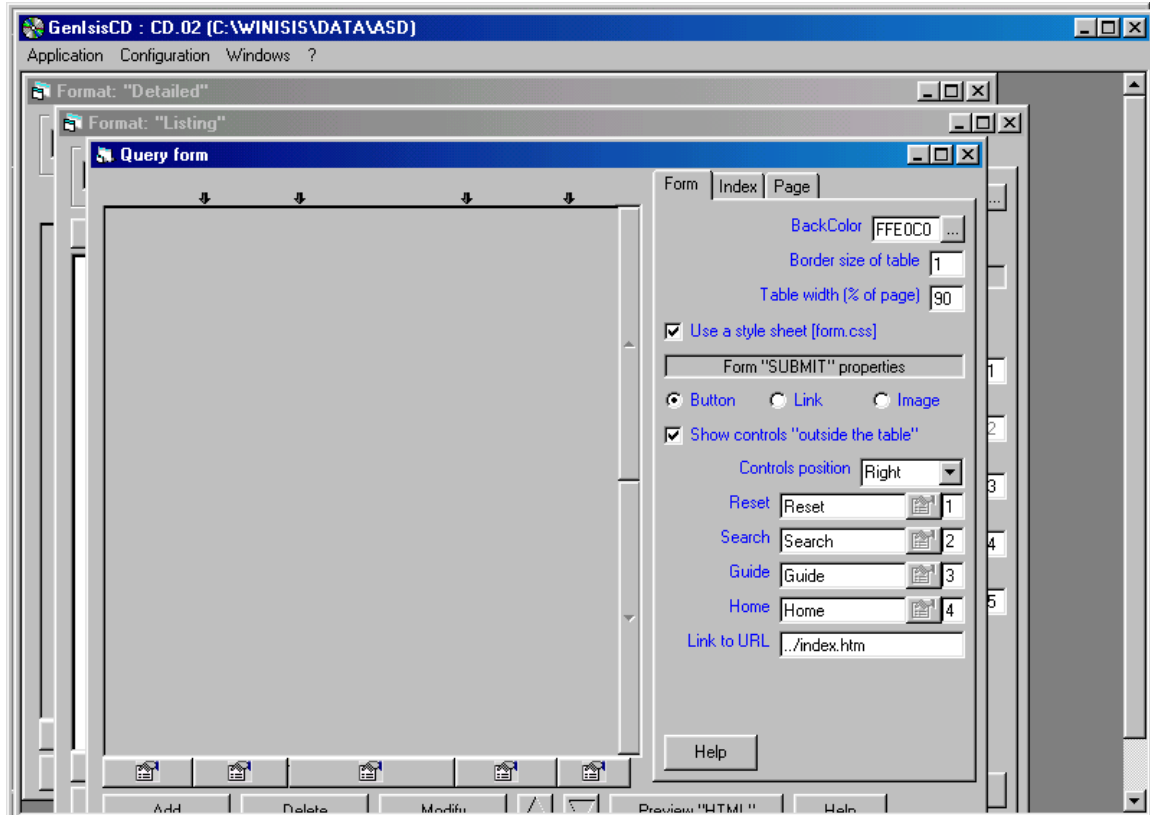
Select the **MST** file then click '**Open**' button in the above screen and you will get the following screen.

Figure 31



Give a name for your application like **MYWEB** and click **OK**.
Then, you will get three window forms one over the other: **Query form**, **Format 'listing'** and **Format 'details'**

Figure 32



Query form allows you to design the web like *Query Form* (a front end form for searching) with a search box for searching the database with any search term. The query form contains an index button that takes you to the indexing terms included in the inverted file of your database, for selecting the appropriate search term.

Format 'listing' allows you to design a *short display format*. A user can select the Detailed Display format from this *Short Display Format*

Format 'details': allows you to design *Detailed Display Format*. *This manual doesn't deal with Format 'details'*.

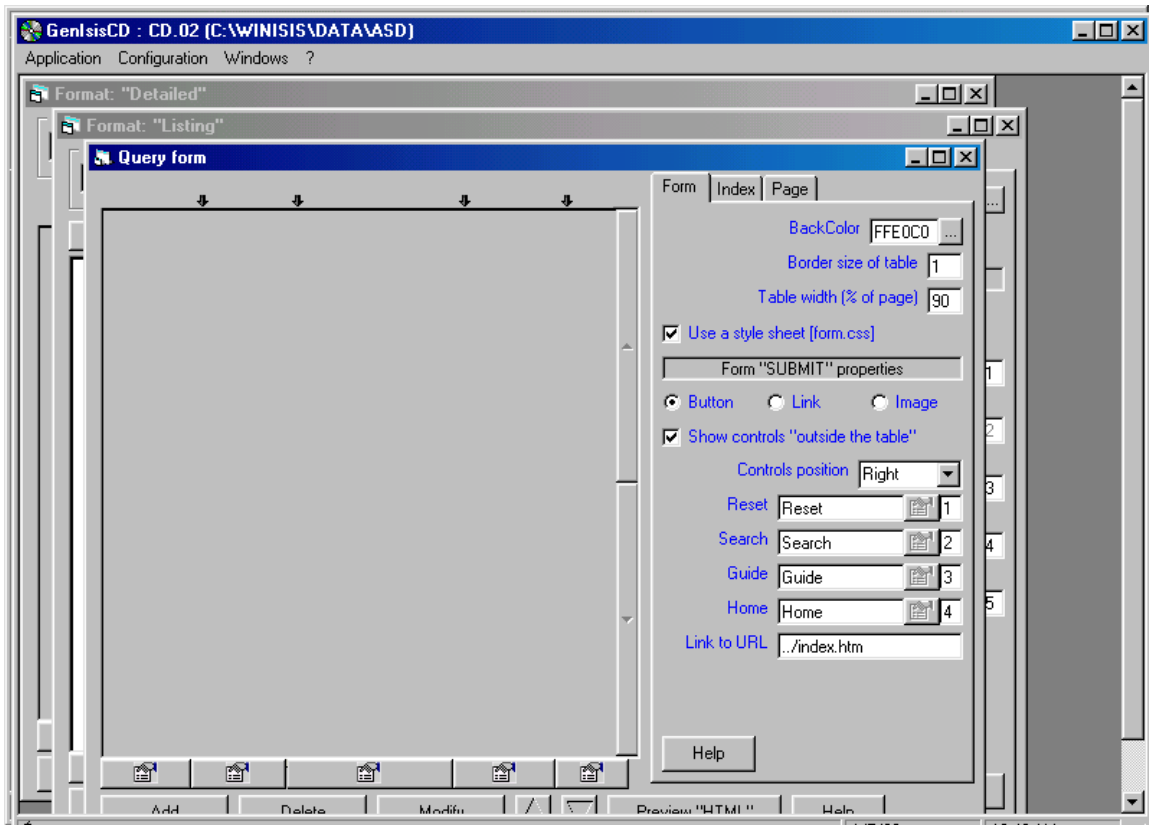
Using these three formats, you will have to design your Query form, Short Display Format and Detailed Display Format

This manual describes about **Query Form** and **Format 'listing'** only, to avoid complex things.

Design the query form

Query Form is the front-end form for making a search .It should contain a search box, submit button and other buttons. You need to create the Query form.

In order to design the query form, you have to select the Query form by clicking on it.
Figure 33



Then Click on **add** button at the bottom of the query form in Fig 33

When you click on **add** button you will get the following window in Figure 34,

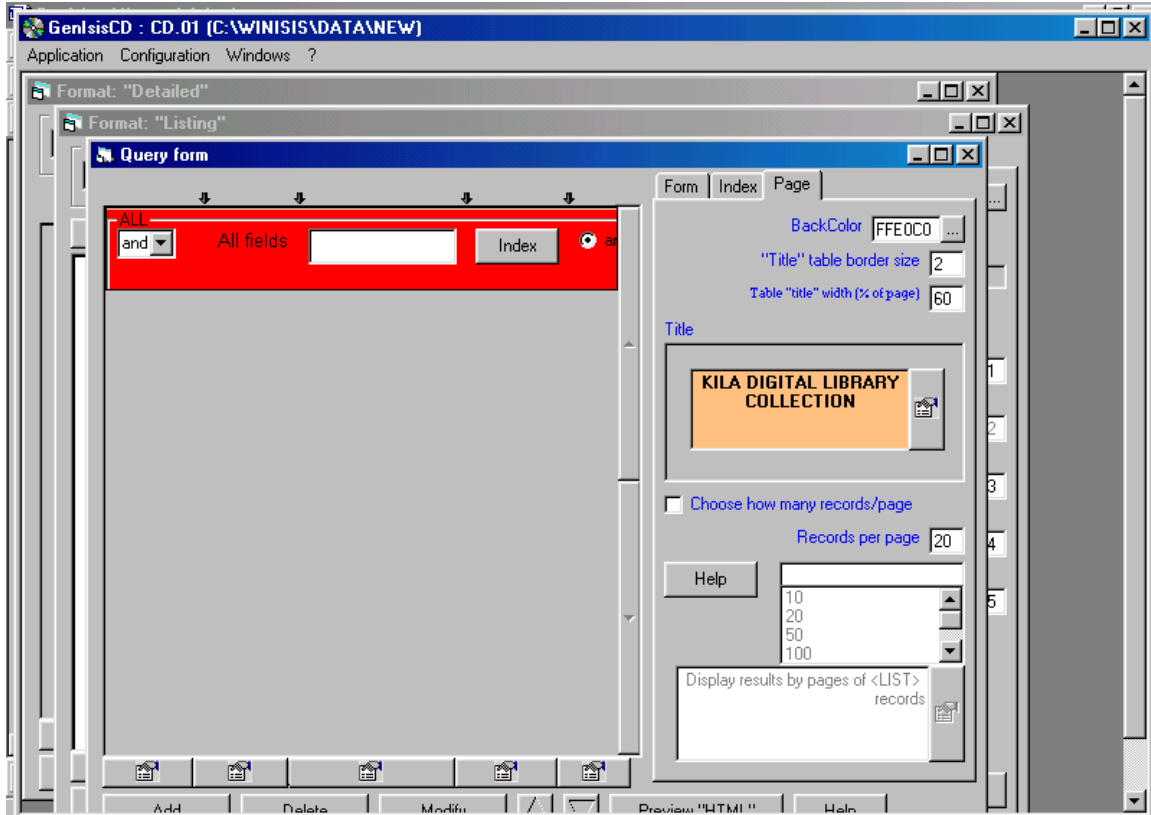
Figure 34

The items appearing on the left panel are the fields you had included in your Winisis database. You may select only one field at a time so as to appear that search box in the Query form. If you want to select more fields you have to click on “**add**” and select another one again until you put all fields. As well, you can select options with regard to the search operators and the appearance of the index button.

In the above screen, it is preferable to select '**All fields**' from the left panel (as it allows search by any term in the index of the database) and then click **ok**

Then, you will be lead to the following window.

Figure 35

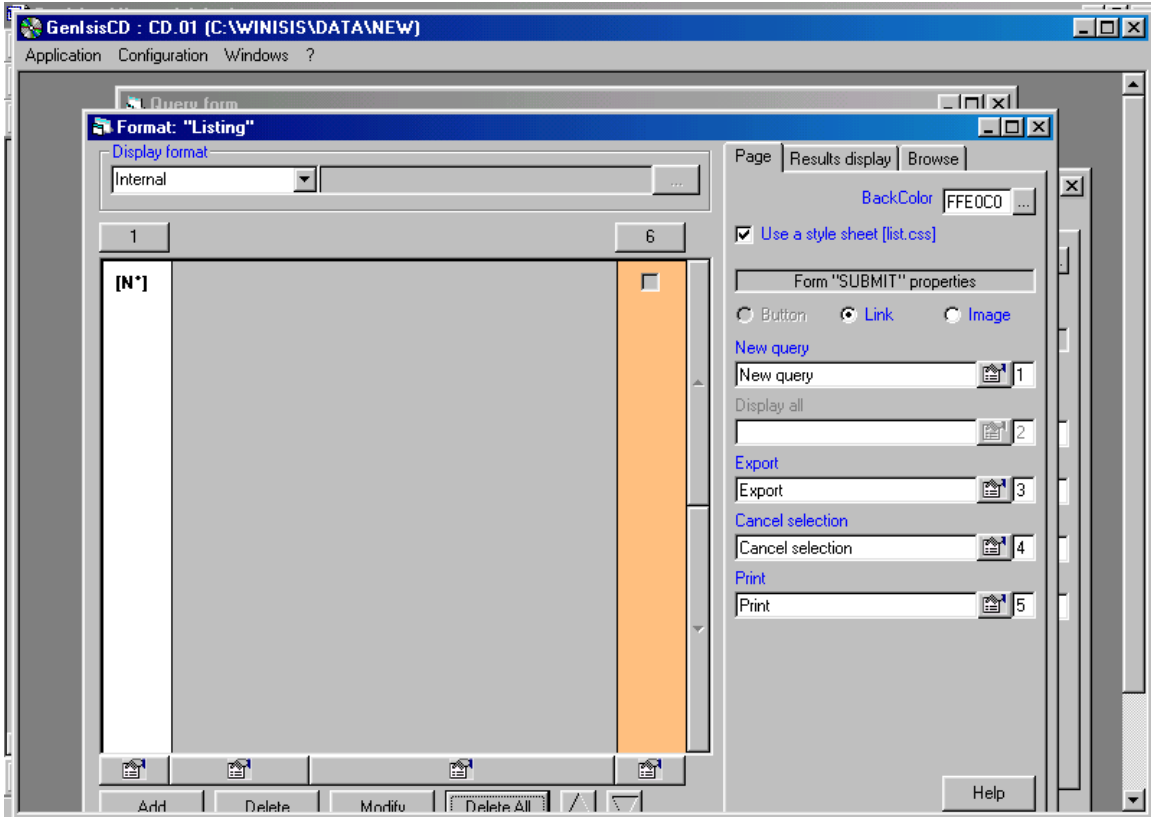


Select any or all the three tabs **Form**, **Index** and **Page** appearing on the right side of the above screen for appropriately choosing the 'look' of the Query Form, Index Page and Display Page. You can play with these options and choose anything you prefer to have a beautiful look for your cd-rom library.

Designing format 'listing'

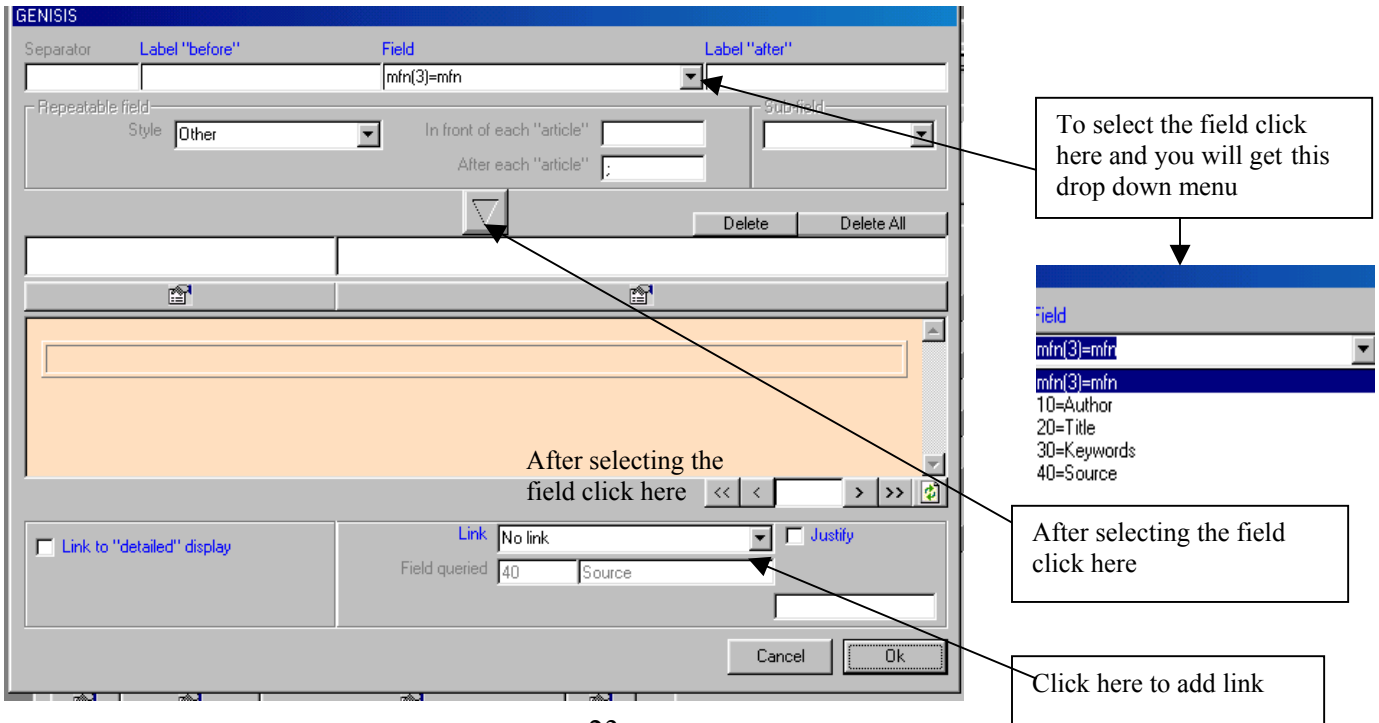
Then click on the 'Format-listing' window, you will get the following default form

Figure 36



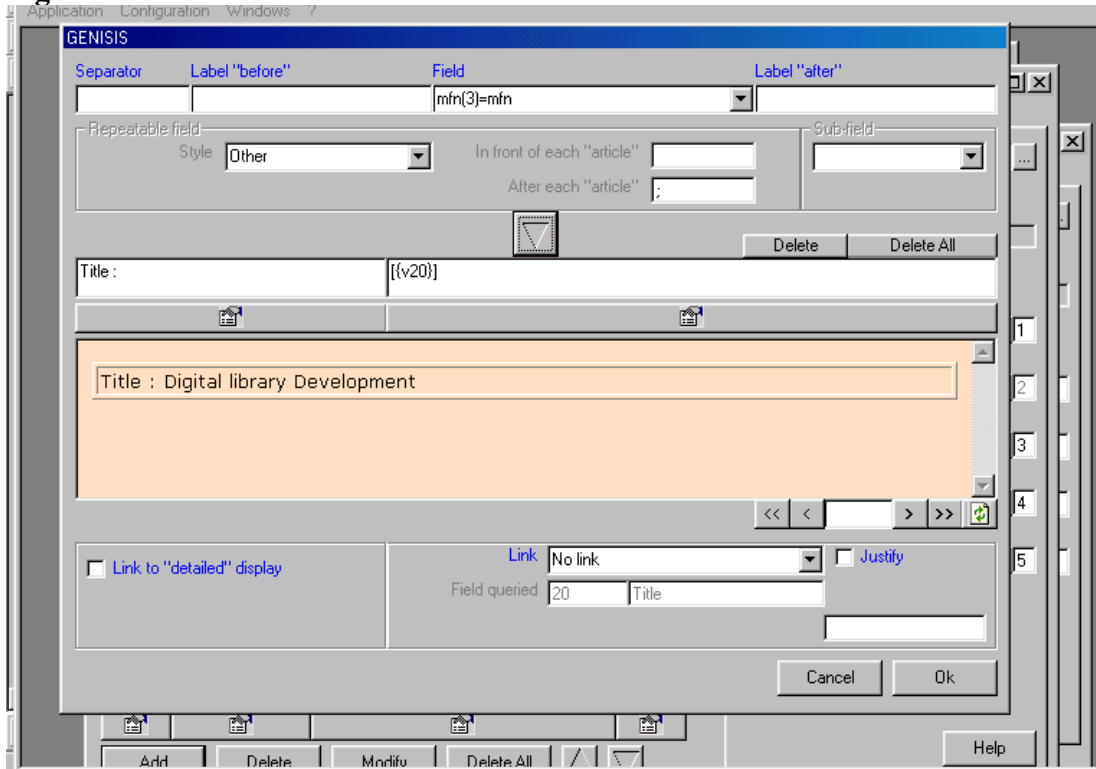
Click **Add** button at the bottom and you will get the following window.

Figure 37



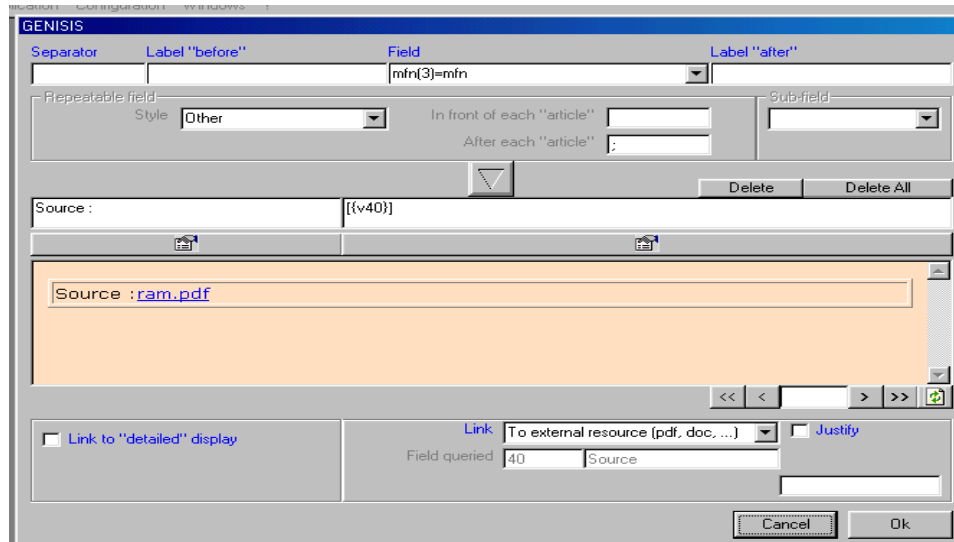
From the above screen, select the appropriate **Field** in the drop down menu and then click the **down arrow** button at the middle and then click **OK** button. Then select the next Field by clicking **Add** button till all **Fields** except **Source**, are selected.

Figure 38



Then select the **Source** that provides the file name (ram.pdf) of the full text document as below.

Figure 39

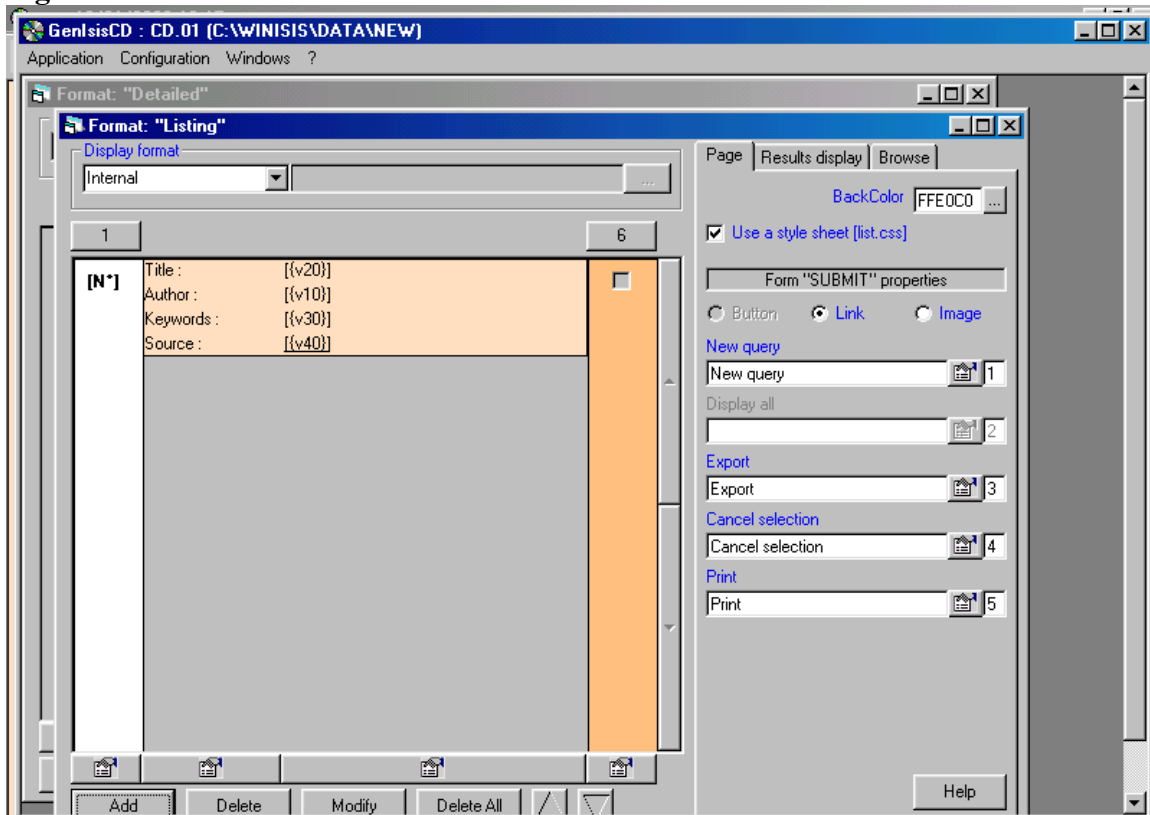


Then, click on the **down arrow** button at the middle as above so as to display the **source** file name *ram.pdf*.

Then select the drop down menu appearing against **link** and select **'To extend resource (pdf. doc...)**, if the full text documents are pdf, doc, html etc. Then you click **Ok** button to save it.

You will move on to the next screen in Fig 40

Figure 40



After designing two forms (Query form, format 'listing'), you may click **'Finalize the application'**.

Click on **Application** drop down menu and select **Finalize the application (before CD burning)** in figure 41

Figure 41

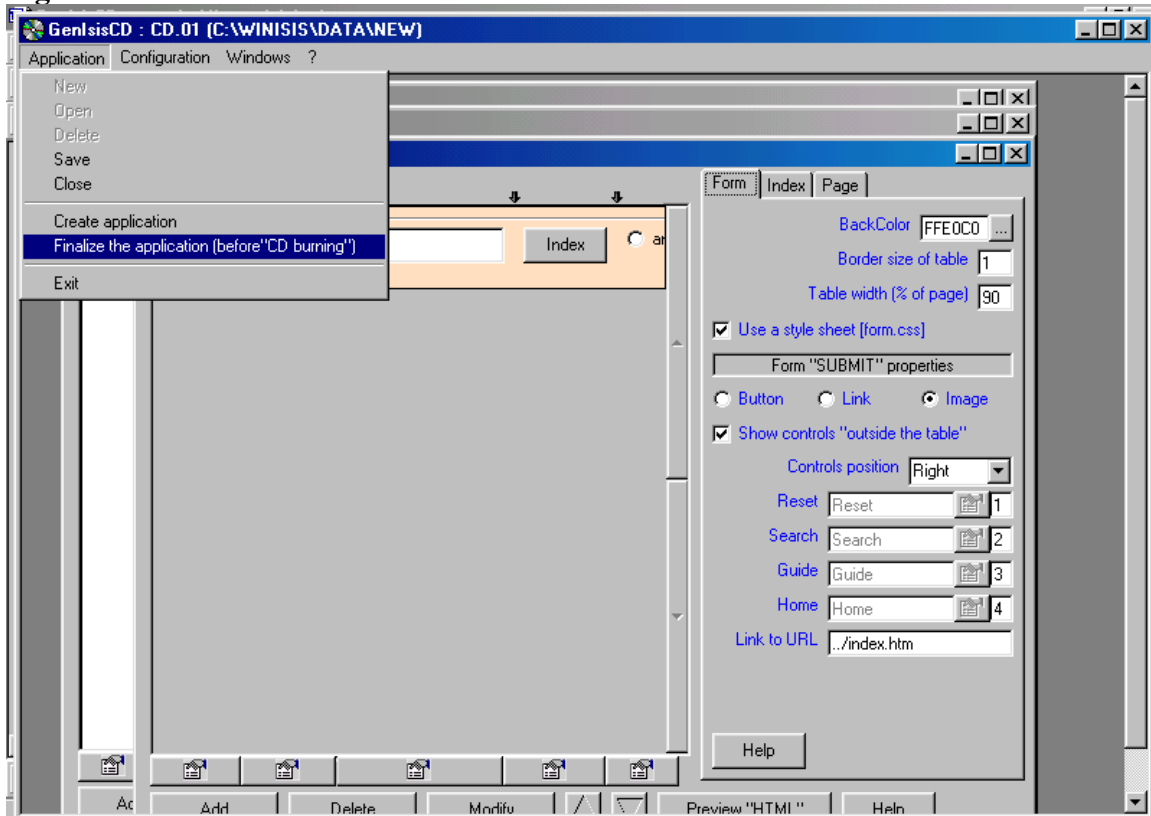
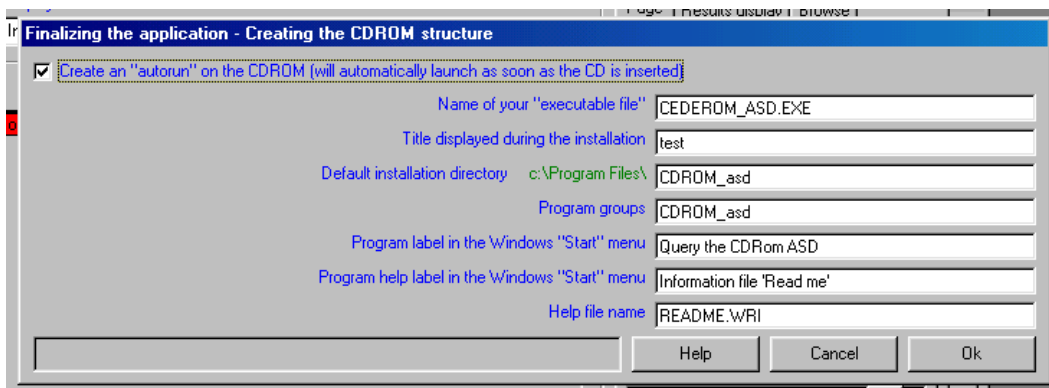


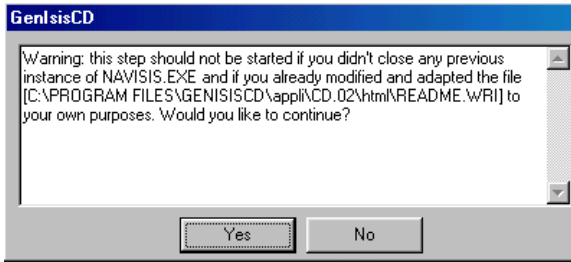
Figure 42



You may put ✓ tick mark on the box to get auto run feature for the burned CDROM

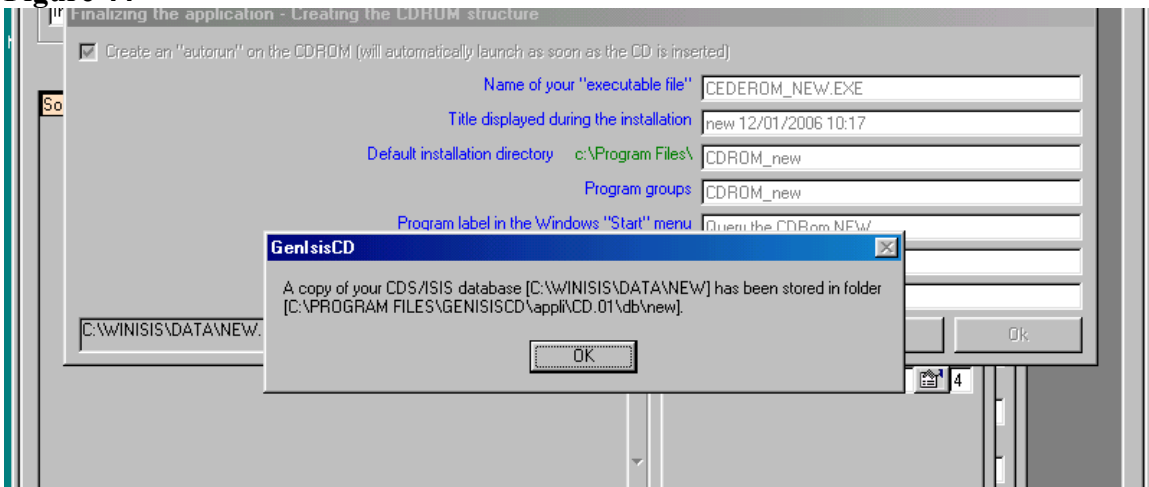
Click **OK** button in the above screen in order to get the following screen.

Figure 43



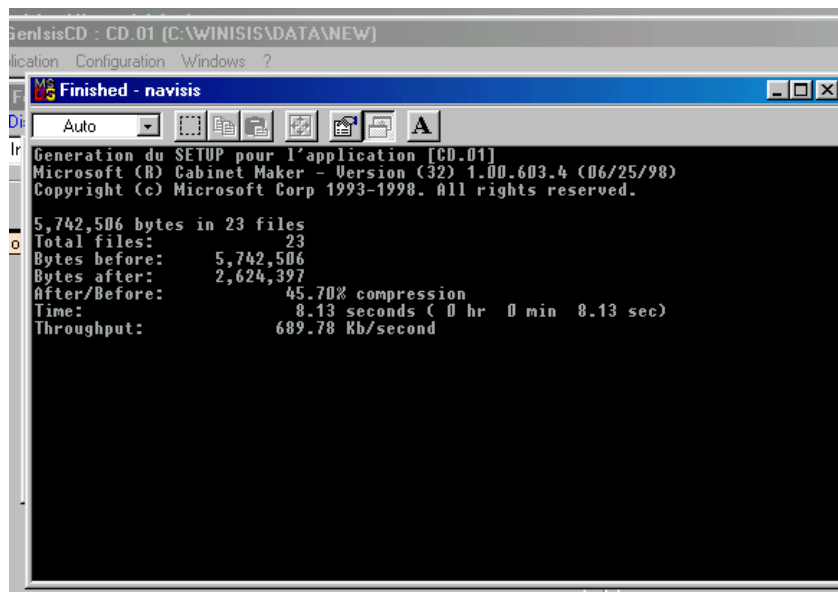
Click **Yes** in the above screen to get the following screen

Figure 44



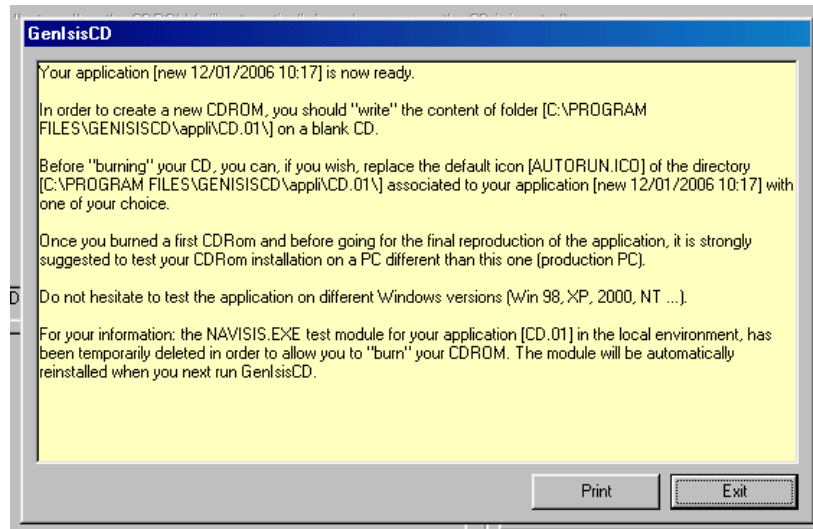
Click **OK** button in the above screen in order to get the following screen.

Figure 45



Allow the above screen to run till its end and then click the **close button (x)** to close the program and to get the following screen

Figure 46



Click **Exit** to close the above window to close your cd-rom file generation process.

Final step

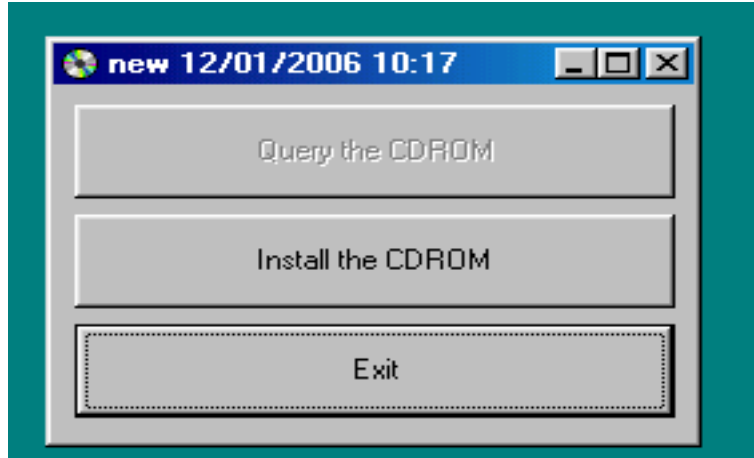
Then *copy* the set of your full text documents to the **html** folder (at 'C:\Program Files\GenIsisCD\ appli\CD.01\html).

Then *delete* the **index.html** in the folder C:\Program Files\GenIsisCD\appli\CD.01\html

Then *copy* **form.html** in the folder C:\Program Files\GenIsisCD\appli\CD.01\html\base_databasename_01 and paste it to the folder C:\Program Files\GenIsisCD\appli\CD.01\html. Then change the name of **form.html** as **index.html**

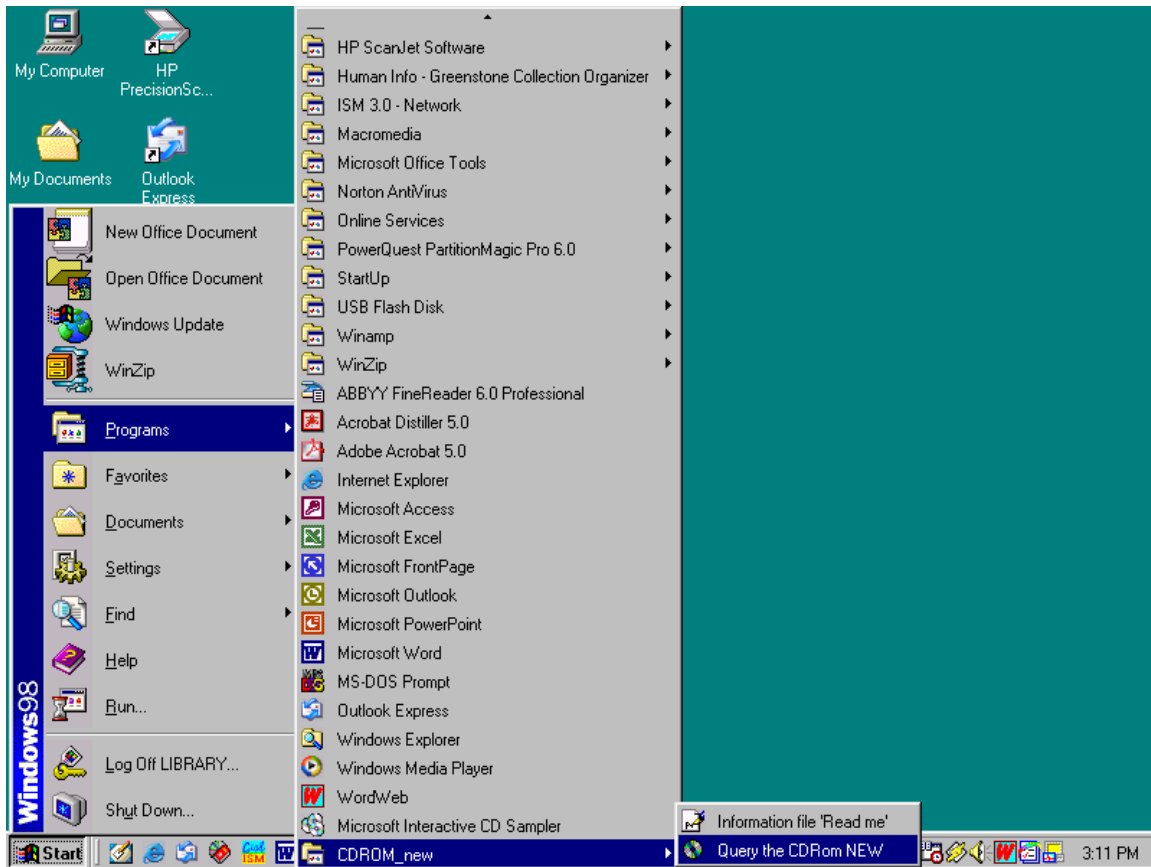
Then you may write contents in the folder **C:\Program Files\GenIsisCD\appli\CD.01** on a new blank CD. You may put the new auto-run cd-rom into any computer and the following screen will appear automatically.

Figure 47



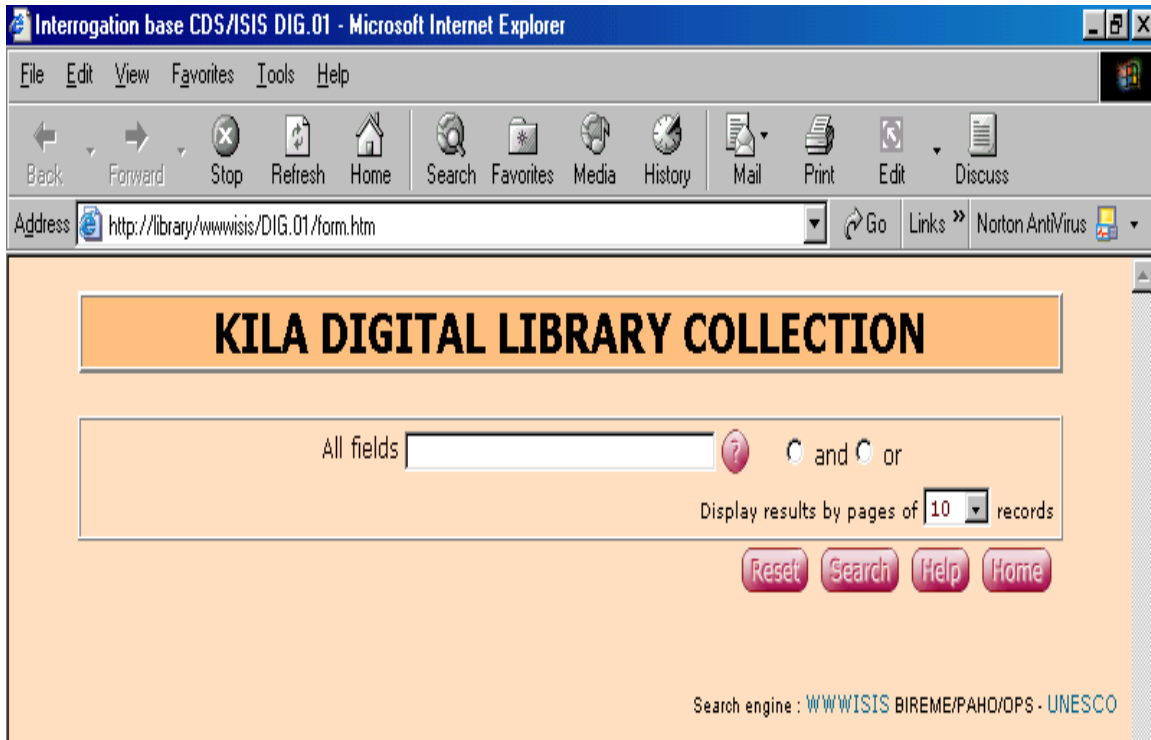
Click on the **Install the CDROM** button and follow the on-screen instructions to install the program.

Figure 48



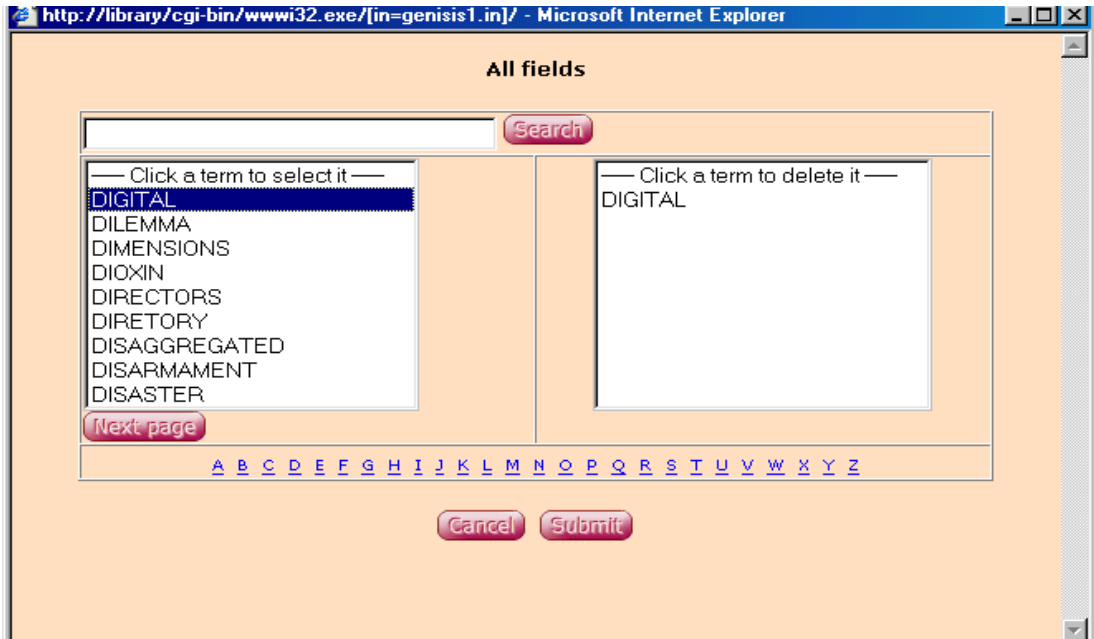
Then go to **Start/programs\cdrom_name\query the cdrom name** to open the query form as follows

Figure 49 Search page of Genesis CD



If you click on the index button, the following screen will appear.

Figure 50 Index page



The purpose of this screen is to help you select an appropriate indexing term from the inverted file index of the database. If you type any letter, letters or words in the search box above and click **search** button, you will get the indexed terms.

Then click on any term and again click on the **submit** button in order to submit that search term to your main search box of the query page in Fig 49. You can then make a search with a definite indexing term in the inverted file index.

Figure 51 Search window

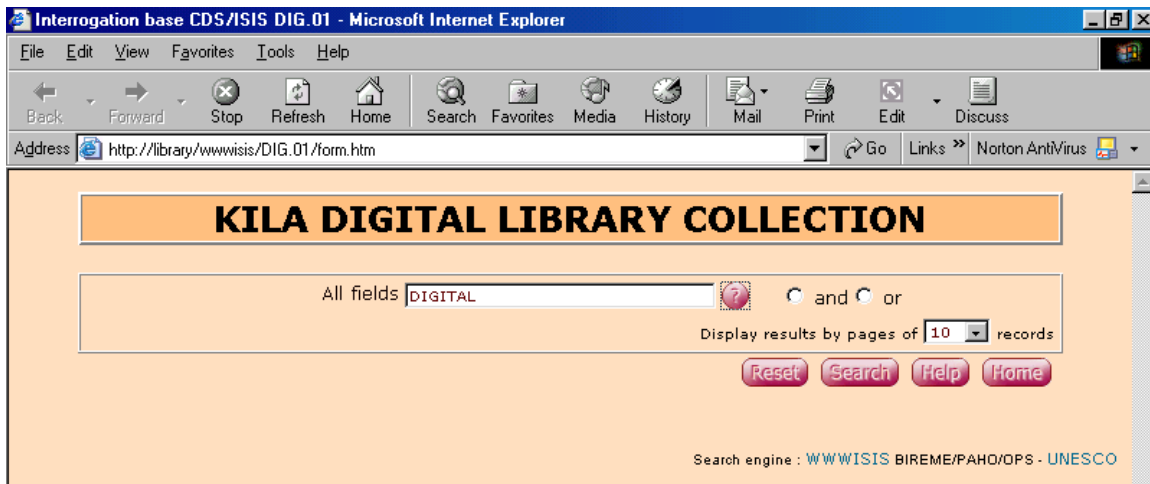
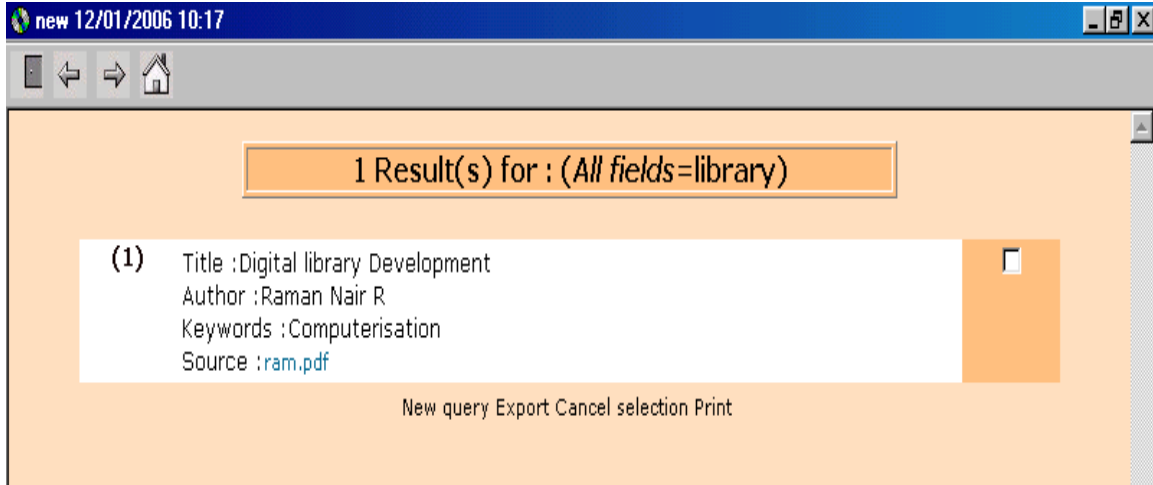


Figure 52 Search result



If you click on the **link** (on *ram.doc* above) in the field **Source** (on *ram.pdf*) provided above, appropriate document would be get opened, automatically, in a new window.

.....

Other useful details

How to obtain GenisisCD?

GenIsisCD has been developed by Pierre Chabert and is distributed free by UNESCO. It can be downloaded from:

<http://www.unesco.org/isis/files/winisis/genisis/cdrom/genisiscd110.exe>

<http://www.scribnet.org/download/genisiscd110.exe>

On Genisisweb

GenIsisWeb is another software that helps you publish your winisis database in the website. The software is available at

<http://www.unesco.org/isis/files/winisis/genisis/web/genisisweb.exe>

You can export the winisis database to an Internet site using genisiweb.

The installation and creation of application using genisisweb is nicely documented in the English manual *Web interface for CDS/ISIS GenIsisWeb Version 3.0.0* by Deepali Talagala, available from <http://www.nsf.ac.lk/purna/genisisman-ver.3.pdf>

Obtaining Winisis

You can obtain Winisis from Unesco website. You need to register for download and you will be notified with download instructions through your email.