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Applies To:

SAP R/3 4.6C – SMART FORMS

Summary

This document illustrates various concepts in Smart Form (Styles, Bar code, Alternative, Tables, Text Element, Loop, Header, Program Lines) and then mailing the smart form output through a report. This smartform display certain records based on condition given in the General Attributes tab in Alternative. Then the report sends mail to the recipient with the attached smartform output.

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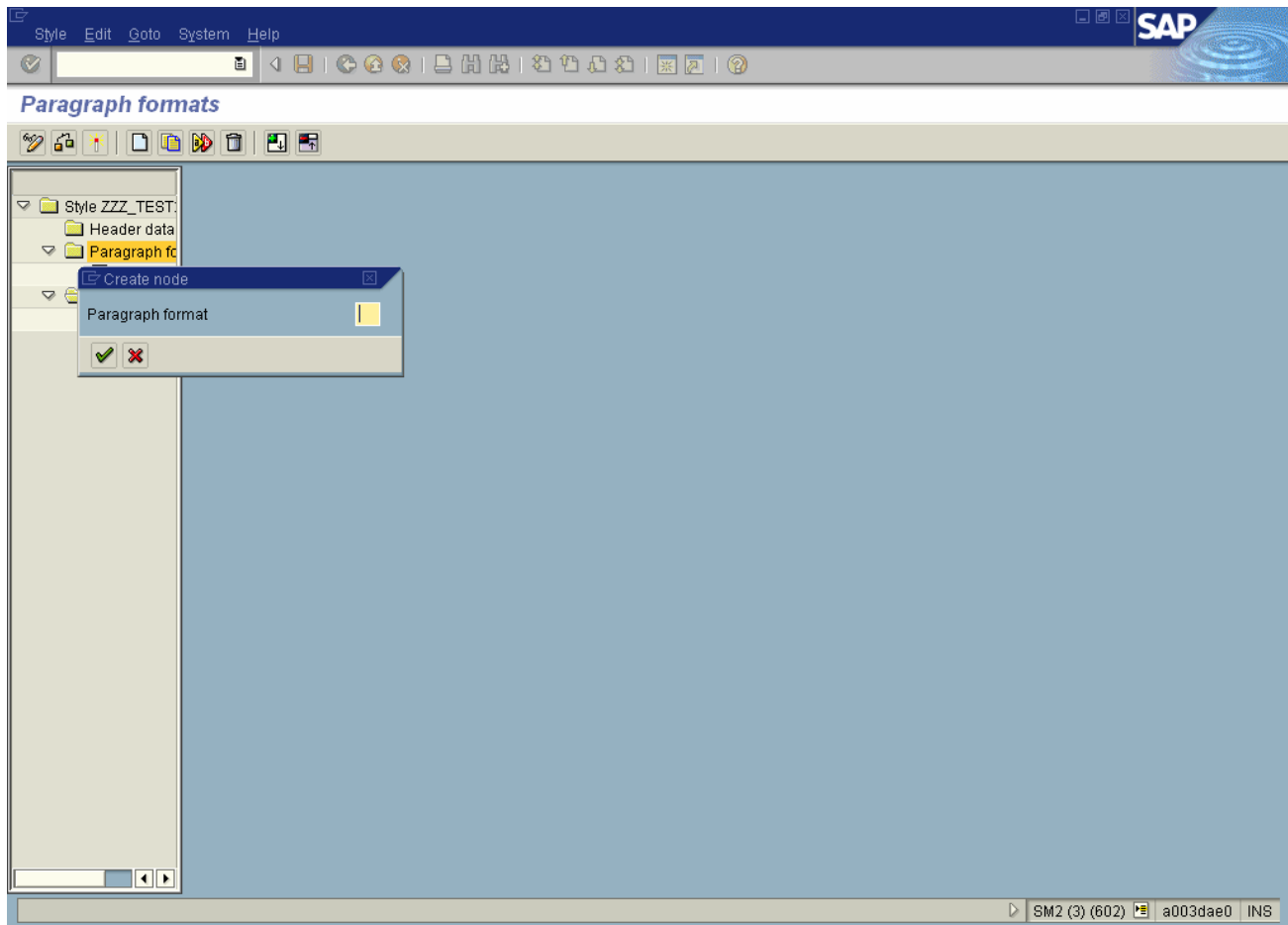
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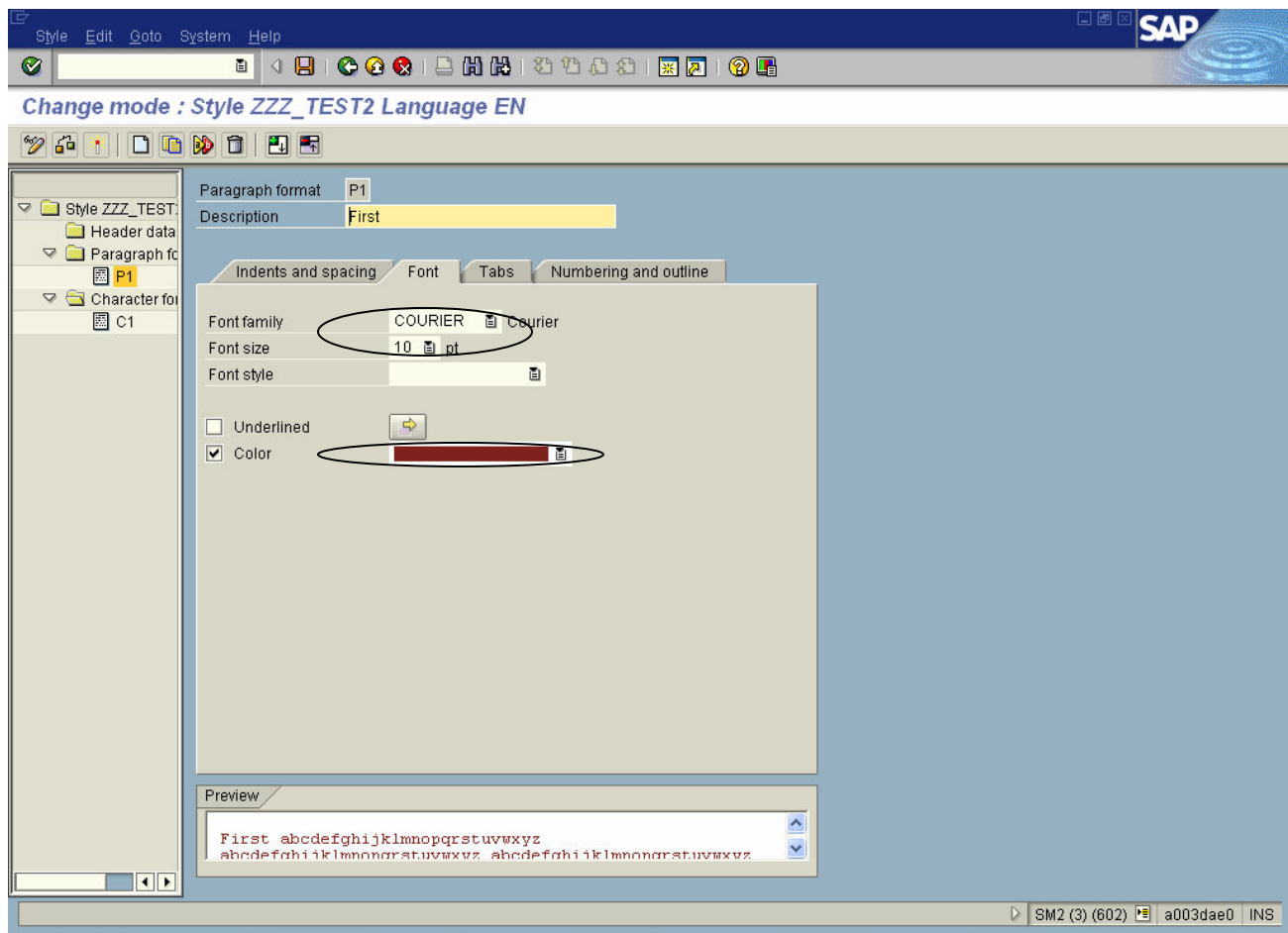
Procedure

Go to the transaction 'Smartforms'.

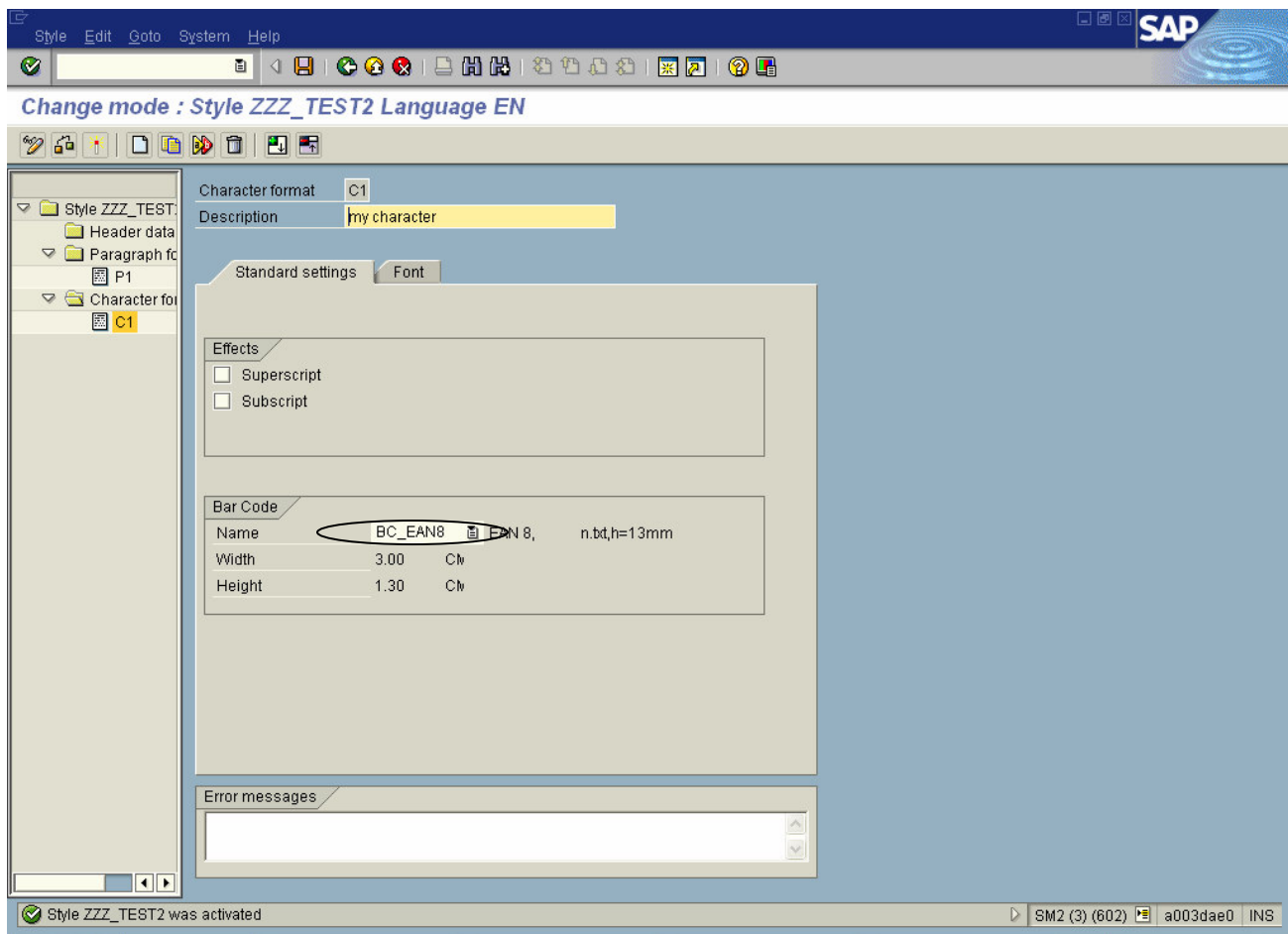
Then create a style(say 'ZZZ_TEST2') by using the second option button.

In that , create a paragraph and character by selecting create node option while right clicking paragraph and character respectively.



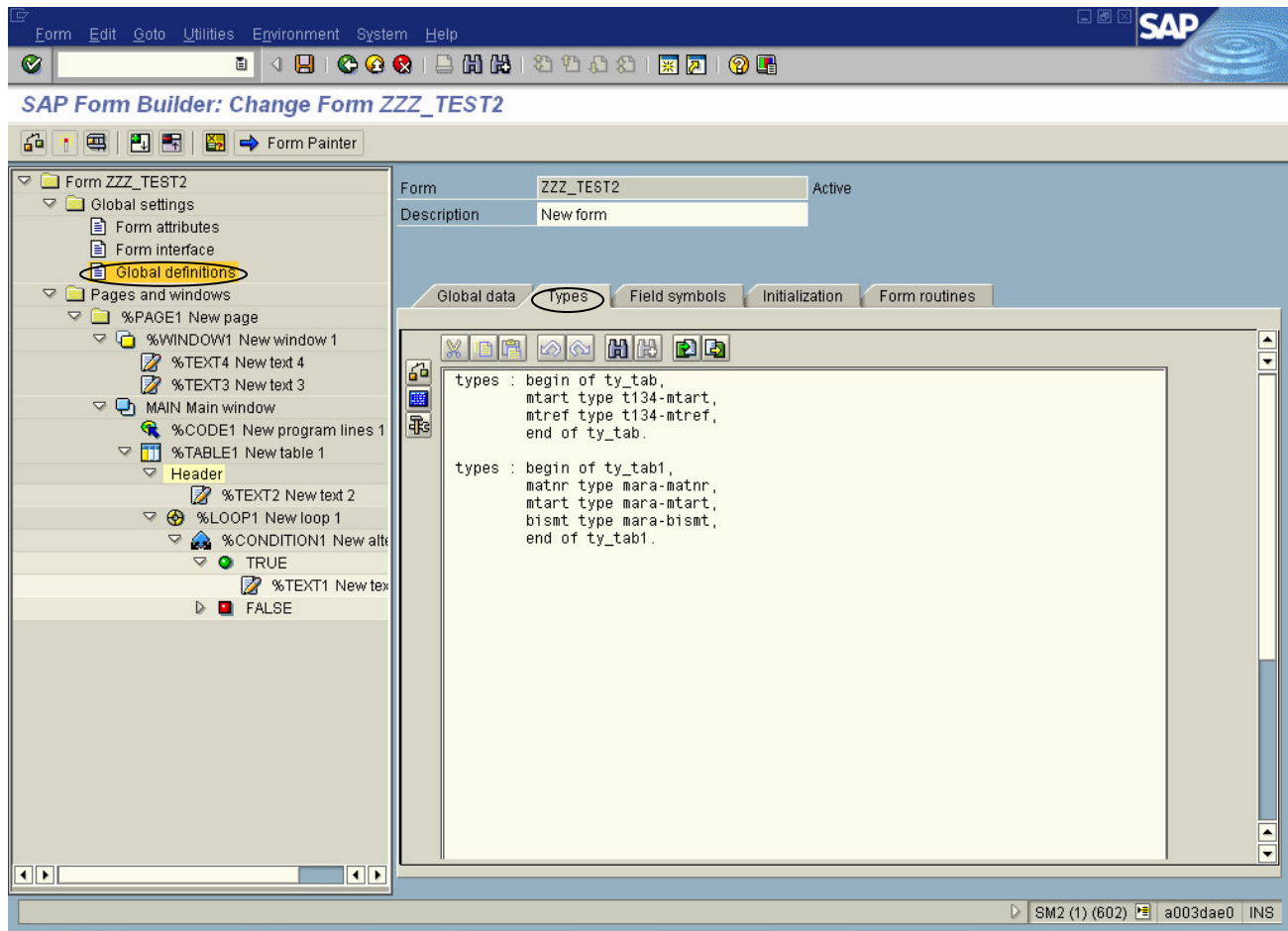


Then change the colour , font family , font size ,etc., in the paragraph(say P1) according to your requirement. Then create a character (say C1) for using bar codes in smart forms.



Then activate the style . Then go to the transaction 'Smartforms' and create a form (say ZZZ_TEST2).

Now in the form there is a folder called Global settings. In that in global definitions set the types as follows.



Then in global data tab, set the variable name, type assignment and reference type as follows.

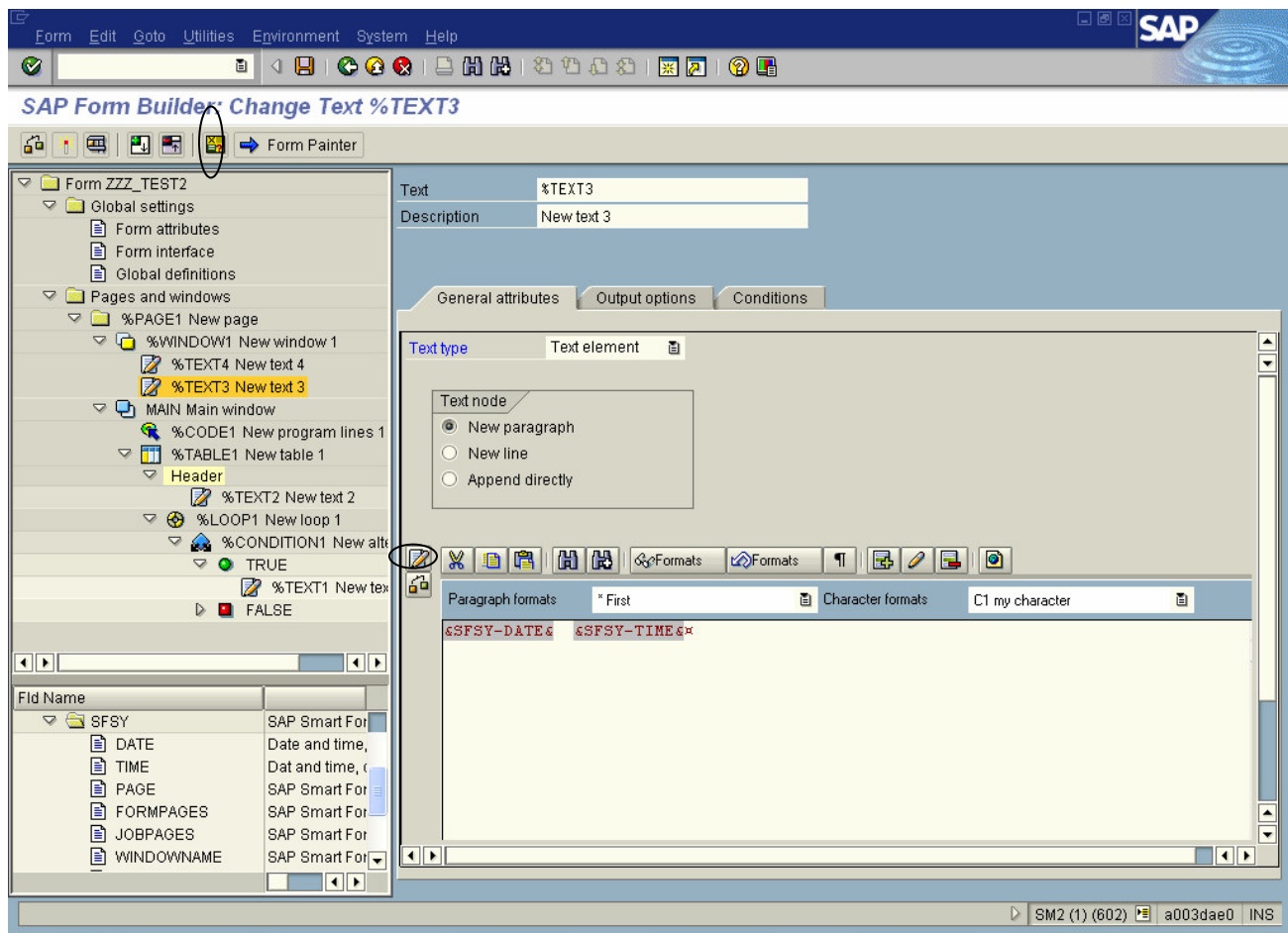
```

WA  TYPE TY_TAB
WA1 TYPE TY_TAB1
ITAB TYPE STANDARD TABLE OF TY_TAB
ITAB1 TYPE STANDARD TABLE OF TY_TAB1
T134 TYPE T134
MARA TYPE MARA
  
```

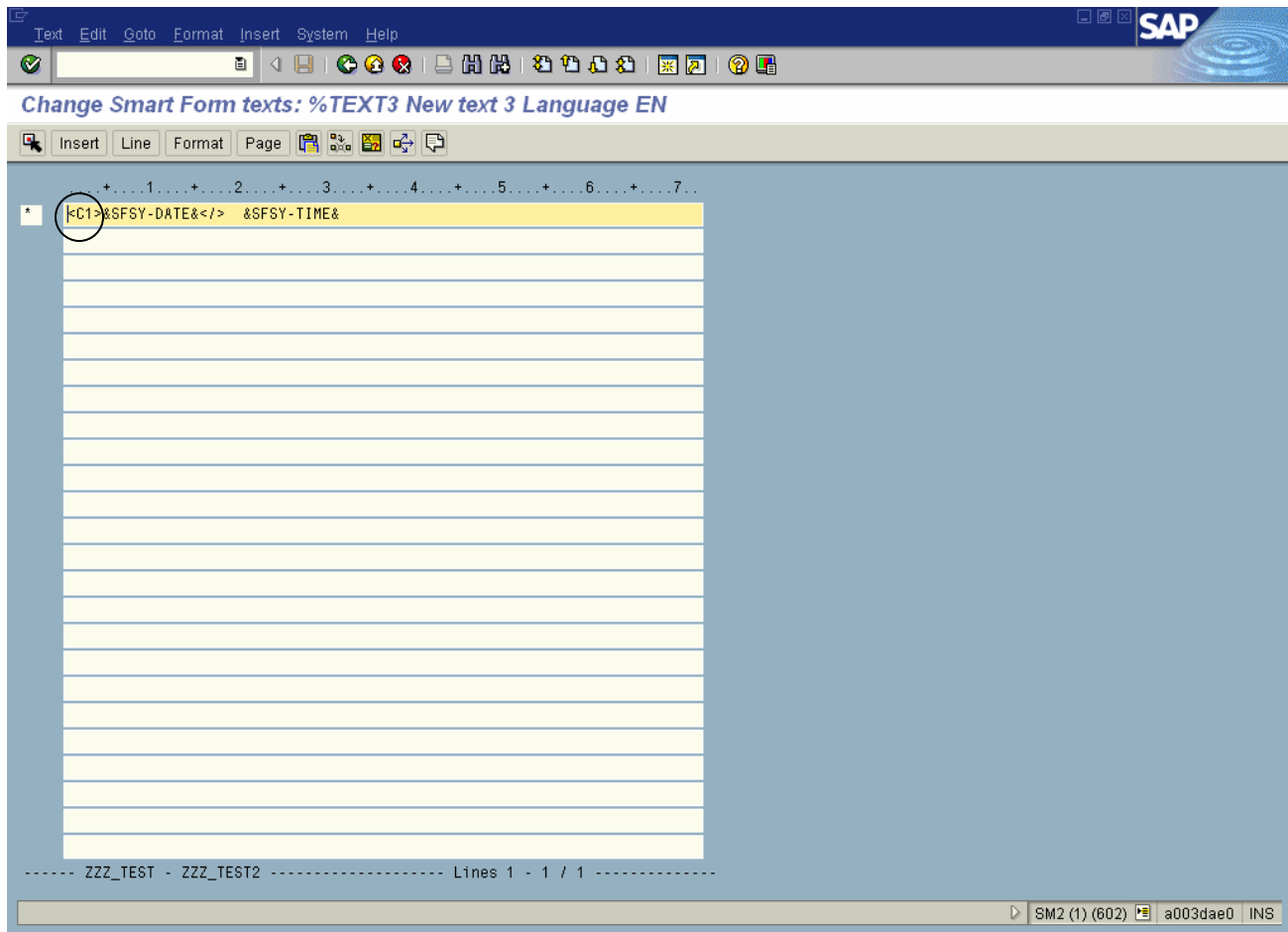
Then create a window and inside the window create text elements as shown. In the output option tab of window, give the width as 20 cm and height as 24 cm.

In the text element type the text to be shown above the main window (Say Material details). Choose the style in output options of the text.

Choose the field list on/off button to drag system date and time from there to text element. Then select Text editor and then in that go to -> change editor



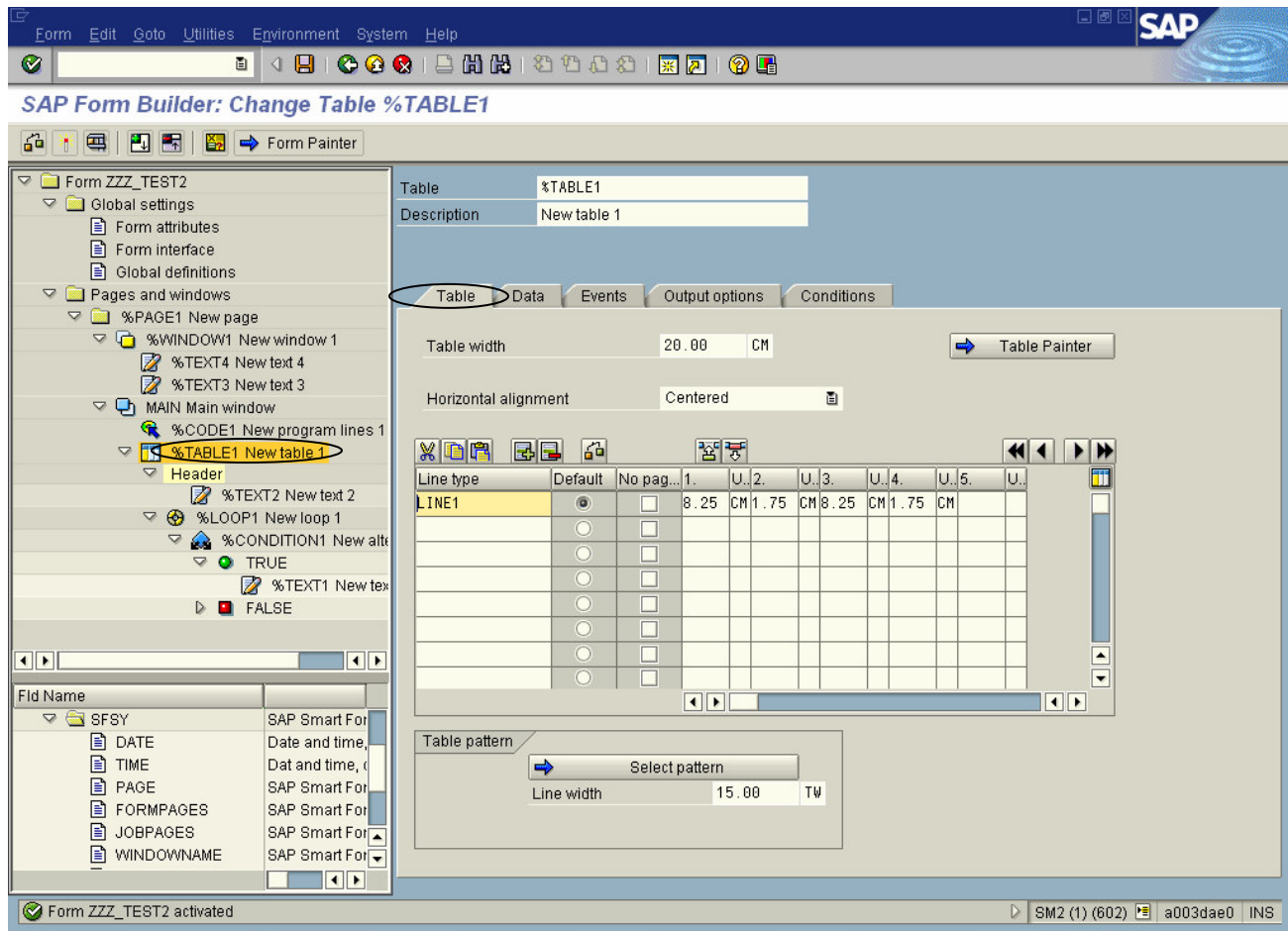
Insert the character created in style (Say C1) in that change editor. That will display the barcode for date.



Then in the main window set the width as 20cm, height as 24 cm ,etc.,
 Then create program line inside that main window and write the following coding there.
 select mtart mtref from t134 into table itab up to 20 rows.
 select matnr mtart bismt from mara into table itab1
 for all entries in itab where mtart = itab-mtart.

Set T134 , Mara as Input parameter and Itab ,Itab1 as output parameter.

Then create a table by right clicking main window.
 Set the parameters in table tab as follows.



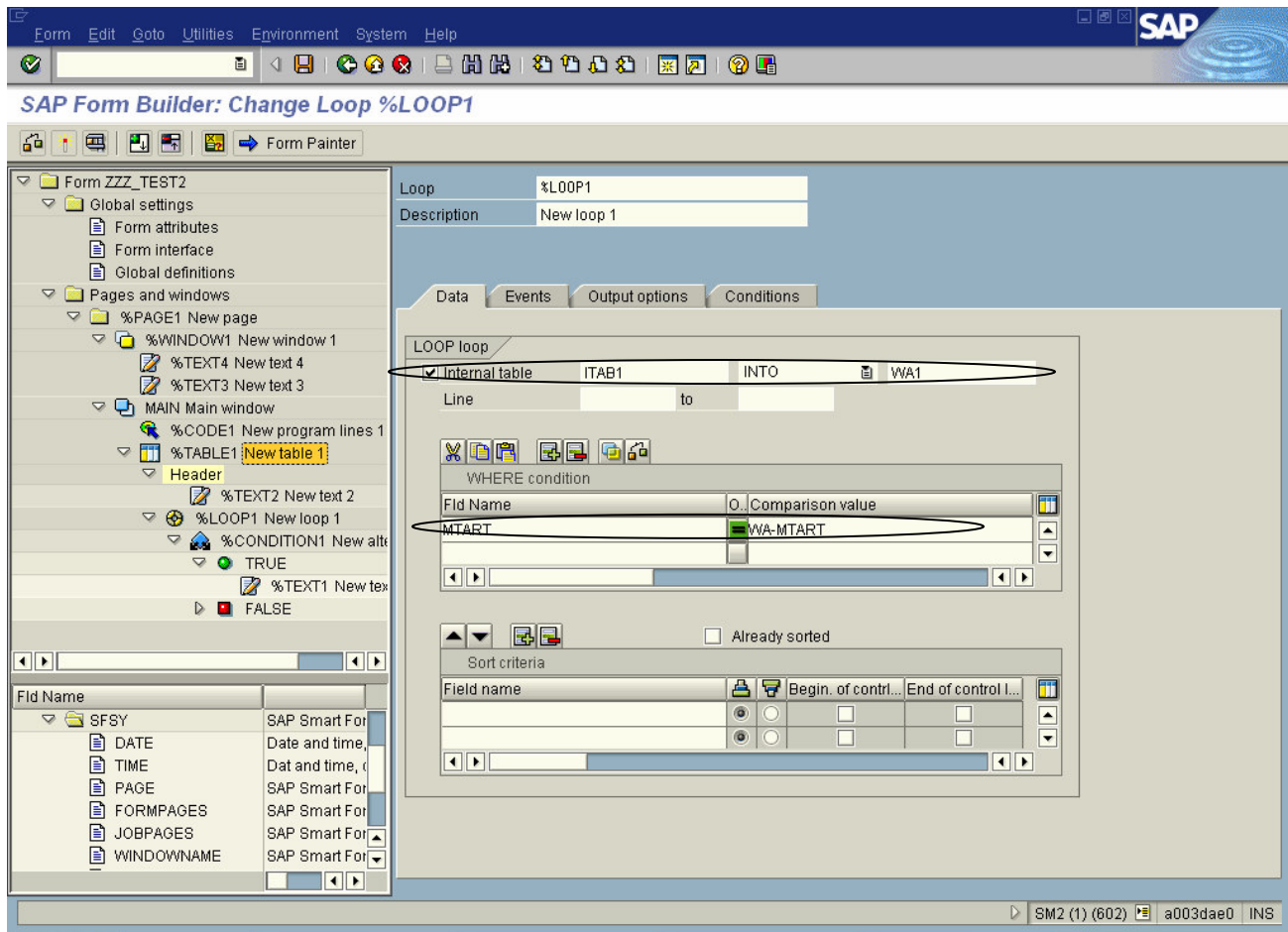
Then in Data tab checkmark the internal table and give itab into wa in it.

Then in Events tab checkmark Header.

Then in Outputoptions tab choose the style(ZZZ_TEST2) which we created.

Then create a Text element inside the Header as shown above. Fill its General Attributes tab with the appropriate title (**Mat.No. Type Old No. Ref.**). Then in its OutputOptions tab check mark New Line and New Cell and Choose Line Type as Line1.

Then create Loop by right clicking Table and then fill its Data tab as below.



Then create Alternative by right clicking loop as shown above.
 Then in the General Attributes tab of Alternative, give condition (say
 WA1-MATNR >= '000000000041802755')

Then in the True node, create a Text Element. In its Output Options tab, check mark New Line and New Cell and select Line1 as Line Type.
 Then using field list drag matnr, mtart, bismt from wa1 and mtref from wa.

Code

REPORT zzz_test3 .

* Internal Table declarations

DATA: i_otf TYPE itcoo OCCURS 0 WITH HEADER LINE,

```

i_tline TYPE TABLE OF tline WITH HEADER LINE,
i_receivers TYPE TABLE OF somlreci1 WITH HEADER LINE,
i_record LIKE solisti1 OCCURS 0 WITH HEADER LINE,

```

* Objects to send mail.

```

i_objpack LIKE sopcklsti1 OCCURS 0 WITH HEADER LINE,
i_objtxt LIKE solisti1 OCCURS 0 WITH HEADER LINE,
i_objbin LIKE solisti1 OCCURS 0 WITH HEADER LINE,
i_reclist LIKE somlreci1 OCCURS 0 WITH HEADER LINE,

```

* Work Area declarations

```

w_objhead TYPE soli_tab,
w_ctrlop TYPE ssfctrlop,
w_compop TYPE ssfcompop,
w_return TYPE ssfcrescl,
w_doc_chng typeE sodocchgi1,
w_data TYPE sodocchgi1,
w_buffer TYPE string,"To convert from 132 to 255

```

* Variables declarations

```

v_form_name TYPE rs38l_fnam,
v_len_in LIKE sood-objlen,
v_len_out LIKE sood-objlen,
v_len_outn TYPE i,
v_lines_txt TYPE i,
v_lines_bin TYPE i.

```

call function 'SSF_FUNCTION_MODULE_NAME'

exporting

```
formname      = 'ZZZ_TEST2'
```

importing

```
fm_name       = v_form_name
```

exceptions

```
no_form       = 1
```

```
no_function_module = 2
```

```
others        = 3.
```

IF sy-subrc <> 0.

```

MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno
      WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.

```

ENDIF.

```
w_ctrlop-getotf = 'X'.
```

```
w_ctrlop-no_dialog = 'X'.
```

```
w_compop-tdnprev = 'X'.
```

```
CALL FUNCTION v_form_name
  EXPORTING
    control_parameters = w_ctrlop
    output_options     = w_compop
    user_settings      = 'X'
  IMPORTING
    job_output_info    = w_return
  EXCEPTIONS
    formatting_error   = 1
    internal_error     = 2
    send_error         = 3
    user_canceled      = 4
    OTHERS             = 5.
IF sy-subrc <> 0.
  MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno
  WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.
ENDIF.
```

```
i_otf[] = w_return-otfdata[].
```

```
CALL FUNCTION 'CONVERT_OTF'
  EXPORTING
    format           = 'PDF'
    max_linewidth    = 132
  IMPORTING
    bin_filesize     = v_len_in
  TABLES
    otf              = i_otf
    lines            = i_tline
  EXCEPTIONS
    err_max_linewidth = 1
    err_format        = 2
    err_conv_not_possible = 3
    OTHERS            = 4.
IF sy-subrc <> 0.
  MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno
  WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.
ENDIF.
```

```
* Convert PDF from 132 to 255.
LOOP AT i_tline.
* Replacing space by ~
  TRANSLATE i_tline USING '~'.
  CONCATENATE w_buffer i_tline INTO w_buffer.
ENDLOOP.
```

* Replacing ~ by space
TRANSLATE w_buffer USING '~ '.

DO.
i_record = w_buffer.
* Appending 255 characters as a record
APPEND i_record.
SHIFT w_buffer LEFT BY 255 PLACES.
IF w_buffer IS INITIAL.
EXIT.
ENDIF.
ENDDO.

Refresh: i_reclist,
i_objtxt,
i_objbin,
i_objpack.

clear w_objhead.

* Object with PDF.
i_objbin[] = i_record[].
DESCRIBE TABLE i_objbin LINES v_lines_bin.

* Object with main text of the mail.
i_objtxt = 'Find attached the output of the smart form.'
APPEND i_objtxt.
i_objtxt = 'Regards,'.
APPEND i_objtxt.
i_objtxt = 'J.Jayanthi'.
APPEND i_objtxt.

DESCRIBE TABLE i_objtxt LINES v_lines_txt.

* Document information.
w_doc_chng-obj_name = 'Smartform'.
w_doc_chng-expiry_dat = sy-datum + 10.
w_doc_chng-obj_descr = 'Smart form output'.
w_doc_chng-sensitivty = 'F'. "Functional object
w_doc_chng-doc_size = v_lines_txt * 255.

* Pack to main body as RAW.
* Obj. to be transported not in binary form
CLEAR i_objpack-transf_bin.
* Start line of object header in transport packet

```
i_objpack-head_start = 1.  
* Number of lines of an object header in object packet  
i_objpack-head_num = 0.  
* Start line of object contents in an object packet  
i_objpack-body_start = 1.  
* Number of lines of the object contents in an object packet  
i_objpack-body_num = v_lines_txt.  
* Code for document class  
i_objpack-doc_type = 'RAW'.  
APPEND i_objpack.  
  
* Packing as PDF.  
i_objpack-transf_bin = 'X'.  
i_objpack-head_start = 1.  
i_objpack-head_num = 1.  
i_objpack-body_start = 1.  
i_objpack-body_num = v_lines_bin.  
i_objpack-doc_type = 'PDF'.  
i_objpack-obj_name = 'Smartform'.  
CONCATENATE 'Smartform_output' '.pdf'  
INTO i_objpack-obj_descr.  
i_objpack-doc_size = v_lines_bin * 255.  
APPEND i_objpack.  
  
* Document information.  
CLEAR i_reclist.  
  
* e-mail receivers.  
i_reclist-receiver = 'jayanthi.gayathri@wipro.com'.  
i_reclist-express = 'X'.  
i_reclist-rec_type = 'U'. "Internet address  
APPEND i_reclist.  
  
* Sending mail.  
CALL FUNCTION 'SO_NEW_DOCUMENT_ATT_SEND_API1'  
  EXPORTING  
    document_data      = w_doc_chng  
    put_in_outbox      = 'X'  
  TABLES  
    packing_list       = i_objpack  
    object_header      = w_objhead  
    contents_hex       = i_objbin  
    contents_txt       = i_objtxt  
    receivers          = i_reclist  
  EXCEPTIONS
```

```

too_many_receivers      = 1
document_not_sent       = 2
document_type_not_exist = 3
operation_no_authorization = 4
parameter_error         = 5
x_error                 = 6
enqueue_error           = 7
OTHERS                  = 8.

```

IF sy-subrc <> 0.

```

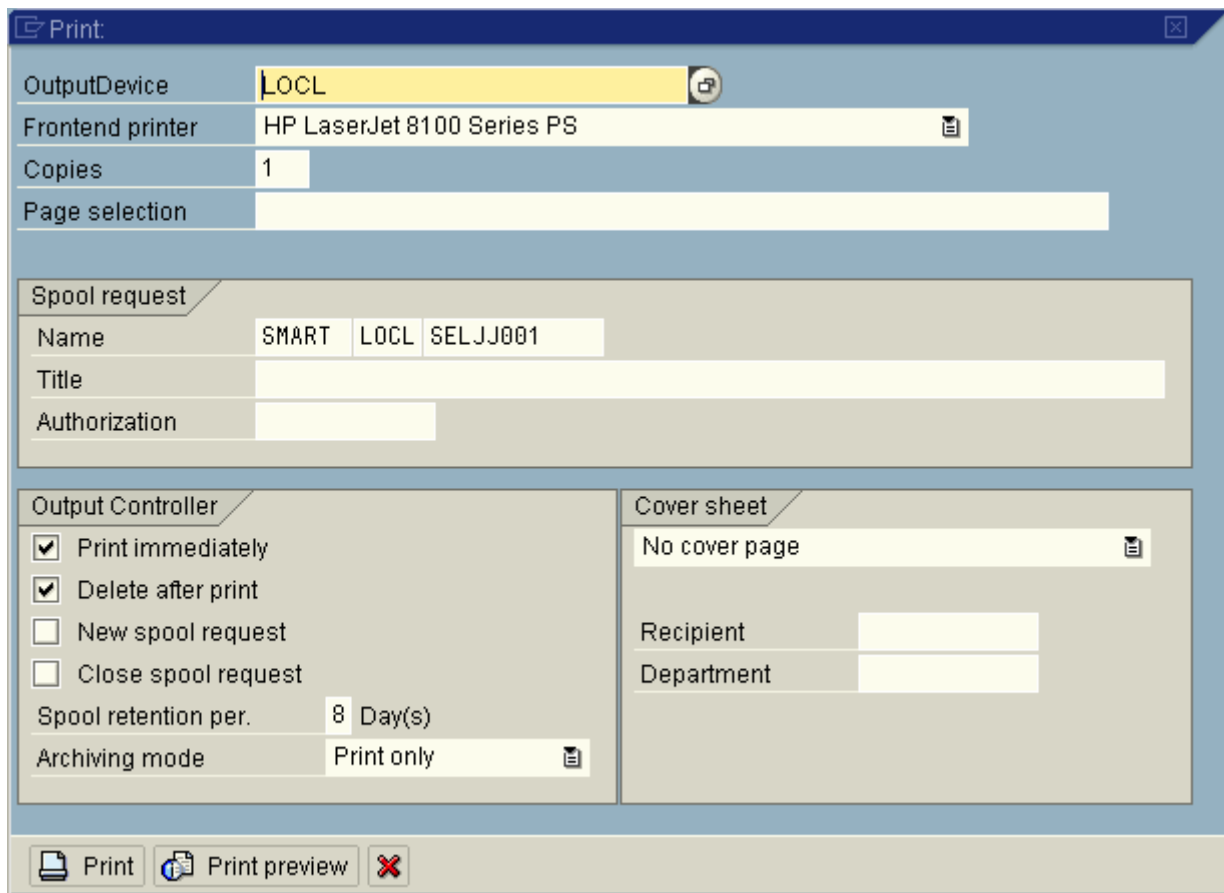
MESSAGE ID SY-MSGID TYPE SY-MSGTY NUMBER SY-MSGNO
  WITH SY-MSGV1 SY-MSGV2 SY-MSGV3 SY-MSGV4.

```

ENDIF.

Output Screens

If we keep on pressing F8 button, we will get the following screen. In that fill LOCL as Output Screen.



The image shows the SAP Print dialog box. The 'OutputDevice' field is set to 'LOCL'. The 'Frontend printer' is 'HP LaserJet 8100 Series P8'. The 'Copies' field is set to '1'. The 'Page selection' field is empty. The 'Spool request' section has 'Name' set to 'SMART', 'LOCL', and 'SELJJ001'. The 'Title' and 'Authorization' fields are empty. The 'Output Controller' section has 'Print immediately' and 'Delete after print' checked, 'New spool request' and 'Close spool request' unchecked, 'Spool retention per.' set to '8 Day(s)', and 'Archiving mode' set to 'Print only'. The 'Cover sheet' section has 'No cover page' selected, and 'Recipient' and 'Department' fields are empty. At the bottom, there are buttons for 'Print', 'Print preview', and a close button.

Then press F8.

Text Edit Goto System Help

Print Preview for LOCL Page 00005 of 00046

Archive Print and archive

Material Details

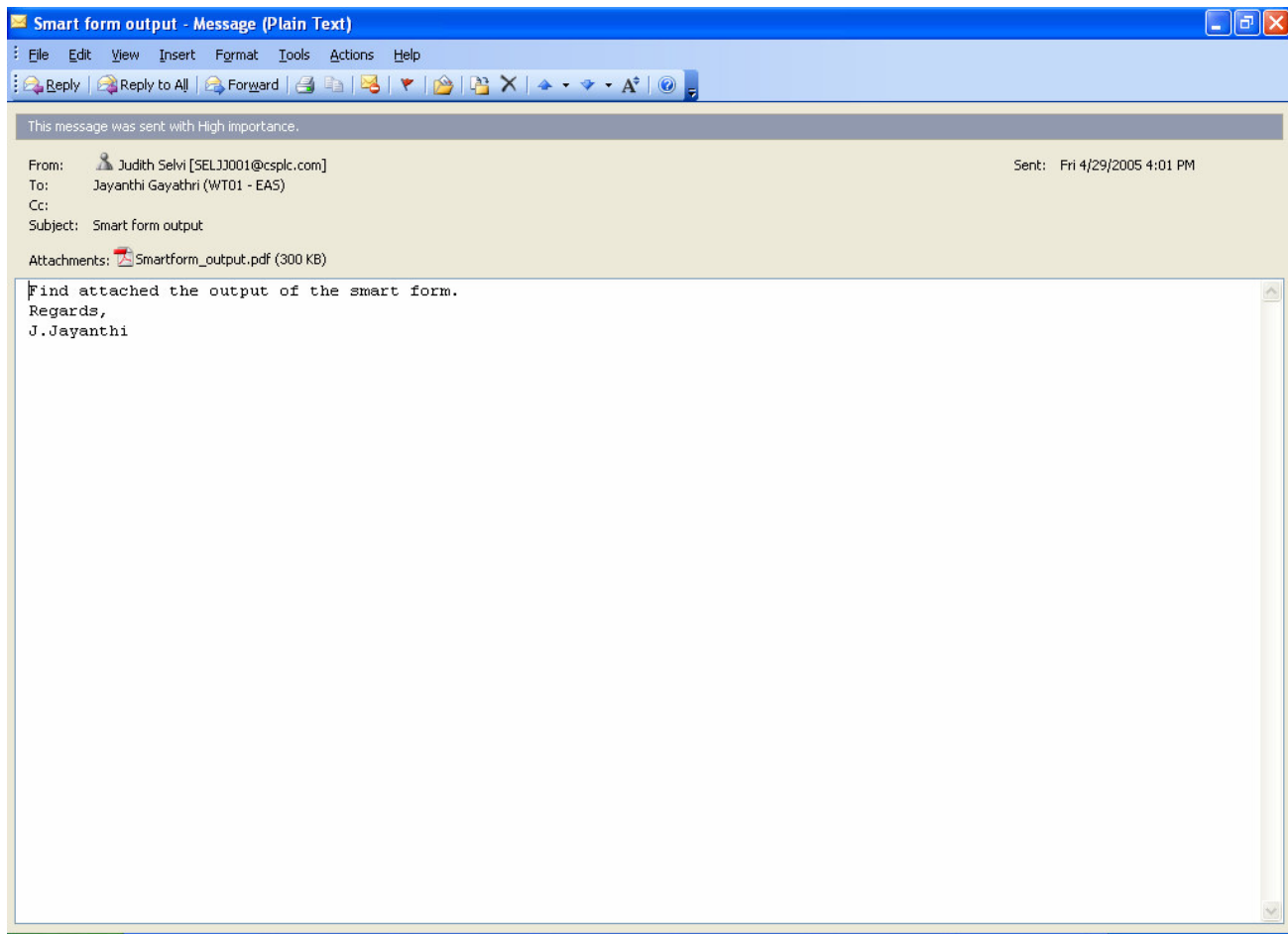
05.48:46

Bar Code for Date

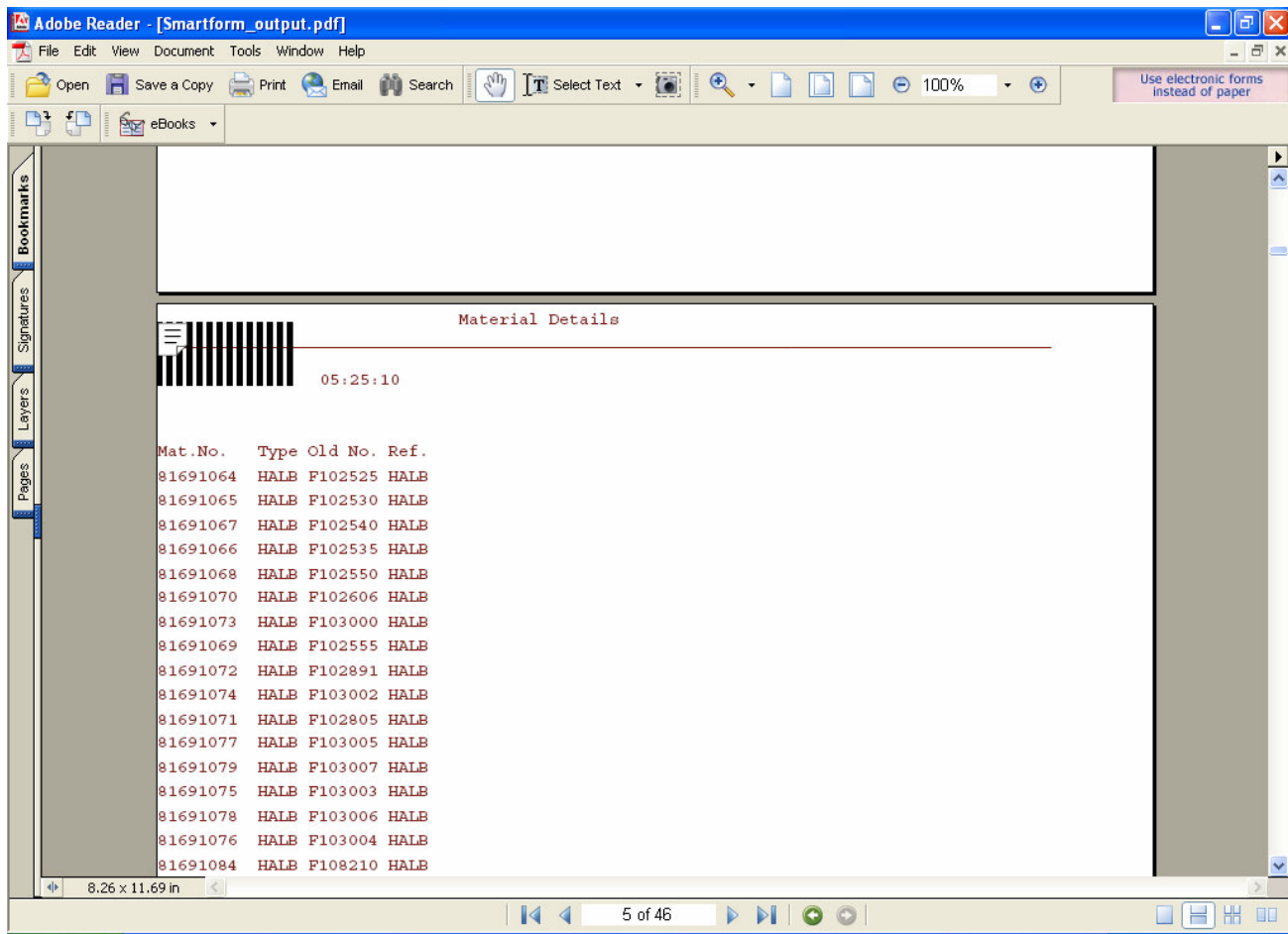
Mat.No.	Type	Old No.	Ref.
81691064	HALB	F102525	HALB
81691065	HALB	F102530	HALB
81691067	HALB	F102540	HALB
81691066	HALB	F102535	HALB
81691068	HALB	F102550	HALB
81691070	HALB	F102606	HALB
81691073	HALB	F103000	HALB
81691069	HALB	F102555	HALB
81691072	HALB	F102891	HALB
81691074	HALB	F103002	HALB
81691071	HALB	F102805	HALB
81691077	HALB	F103005	HALB
81691079	HALB	F103007	HALB
81691075	HALB	F103003	HALB
81691078	HALB	F103006	HALB
81691076	HALB	F103004	HALB
81691084	HALB	F108210	HALB
81691082	HALB	F106000	HALB
81691083	HALB	F108200	HALB
81691081	HALB	F103014	HALB

SM2 (1) (602) a003dae0 INS

Then after generated the report, the mail will be sent to the intended recipient.



Then that recipient can see the attached PDF.



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Author Bio



Working as Senior Project Engineer in Wipro Technologies .