LIT TRAINING

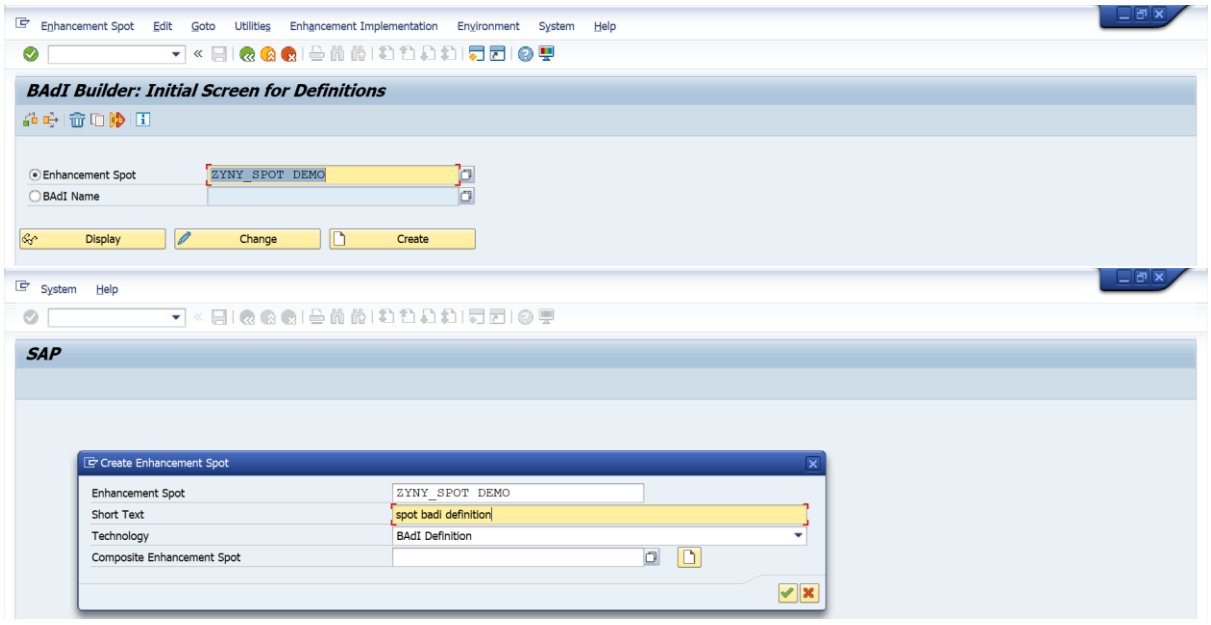
Batch Name - SAP ABAP - 25 **DAY 10 ASSIGNMENT**
EMPLOYEE ID – 46247689

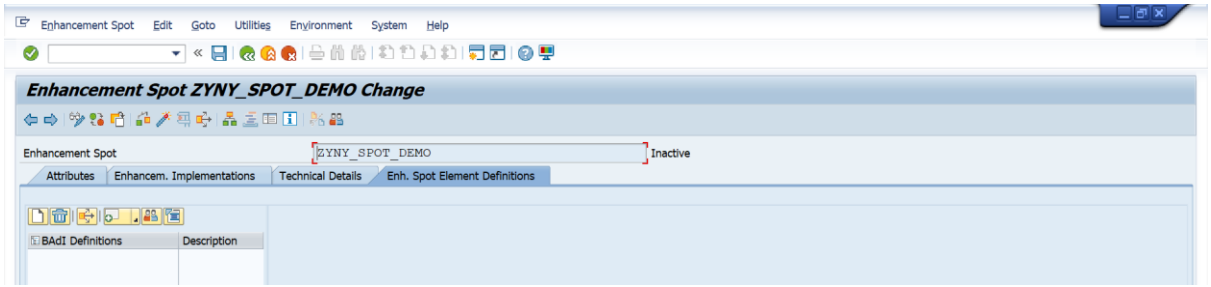
Assignment 3 – Business Add in (BADI)-Single Use

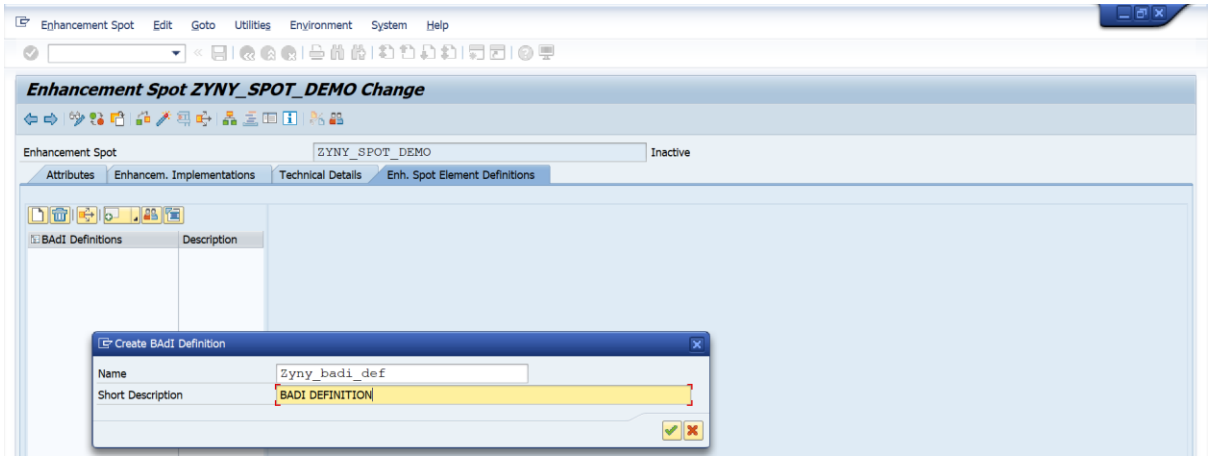
Hint:

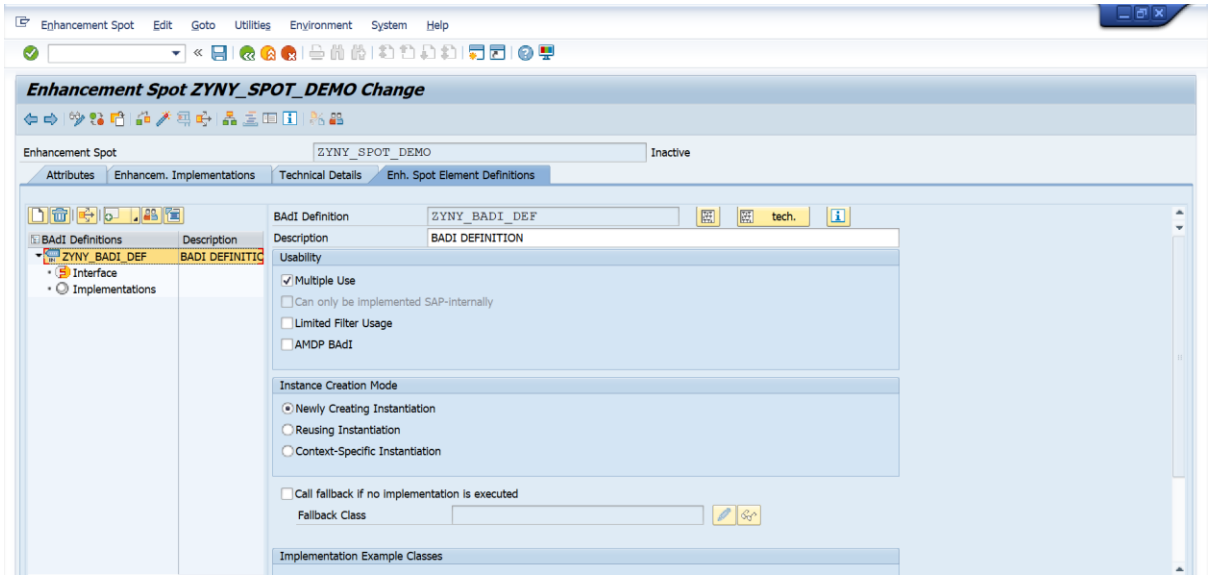
1. **SE18 should be used to define a BADI**
2. **SE19 should be used to implement the BADI Definition.**

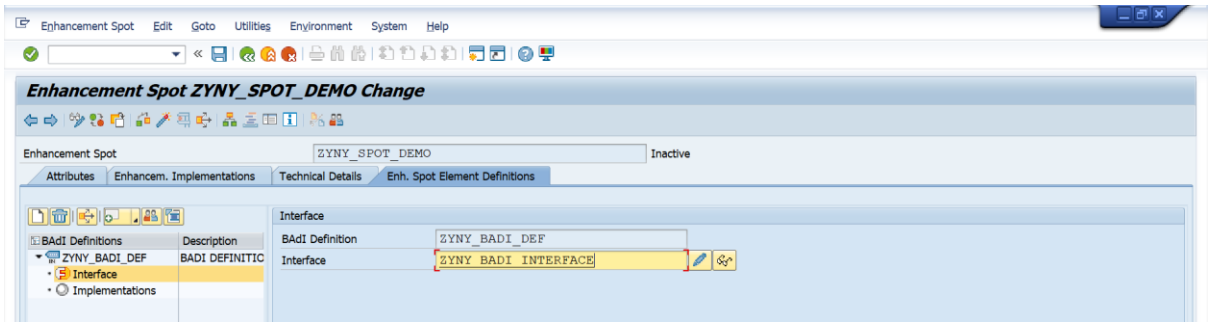
Requirement: Define and implement a custom BADI in SE18 to divide two numbers.
Step1: Define a BADI (ZBADI_DEMO_01…05) in SE18.
Step2: Double click on the interface created to define the methods, parameters and exceptions.
Step3: Define an instance method DIVIDE_NUMBERS.
Step4: Define two importing parameter's (I_NUM1 & I_NUM2) and one exporting parameter (E_RESULT) of type integer
Step5: Define an exception if division is carried out using null value.
Step6: Create an implementation (ZBADI_DEMO_IMP_01...05) by specifying the BADI name that was created in step1.u
Step7: Double click on the method and write the source code to divide the two numbers.
Step8: Create a wrapper program (ZDEMO_BADI_01…05).
Step9: Define a reference variable of type BADI interface.
Step10: Define selection screen with two parameters of type integers
Step11: Call method GET_INSTANCE of the class CL_EXITHANDLER to get the BADI instance
Step12: Call method DIVIDE_NUMBERS using this instance and pass the two selection parameters.

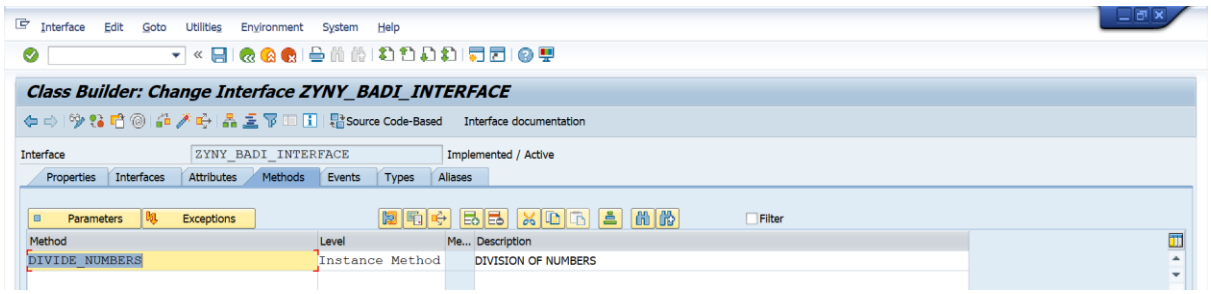


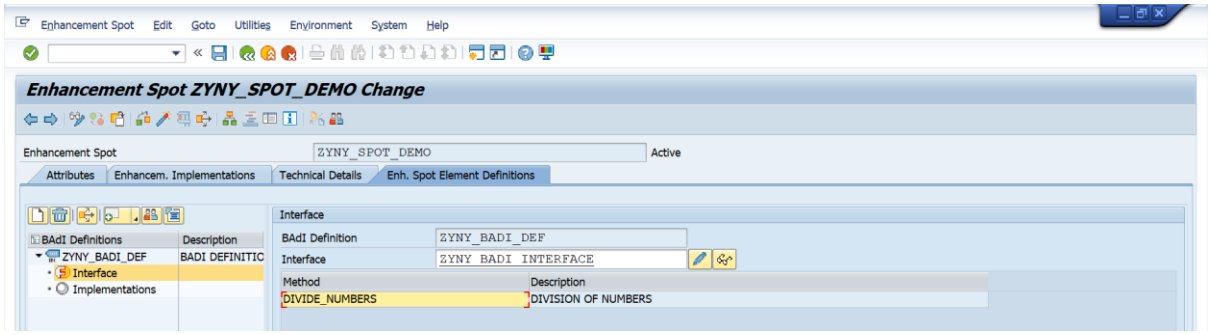



Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO Change
Enhancement Spot
ZYNY_SPOT_DEMO
Inactive
Attributes
Enhancem. Implementations
Technical Details
Enh. Spot Element Definitions
BAdI Definitions
Description
Create BAdI Definition
Name
Zyny_badi_def
Short Description
BADI DEFINITION

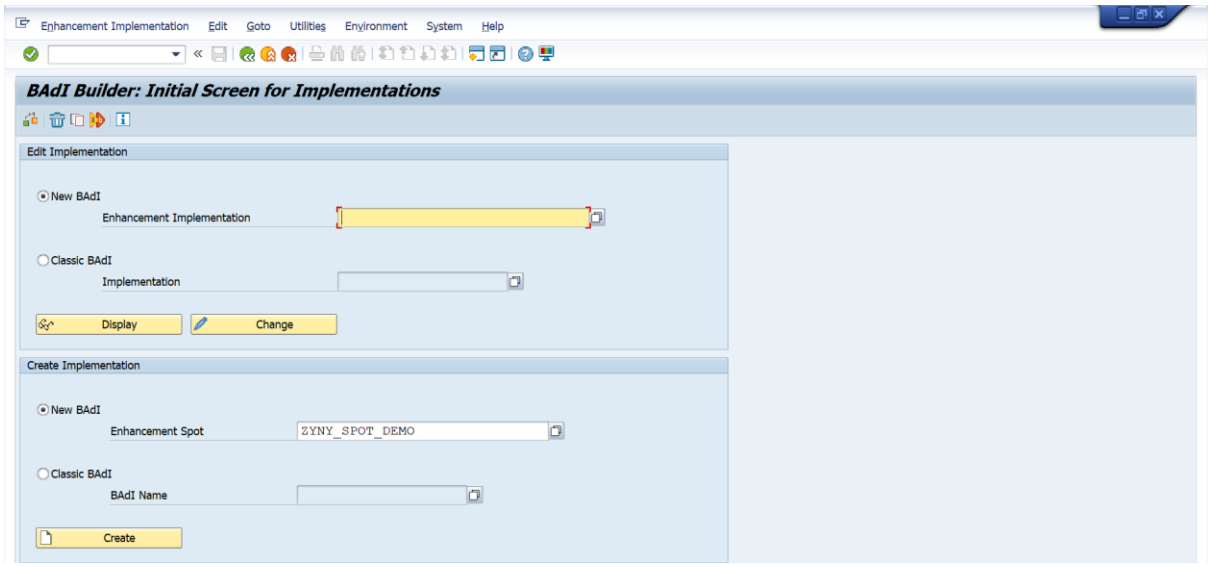

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO Change
Enhancement Spot
ZYNY_SPOT_DEMO
Inactive
Attributes
Enhancem. Implementations
Technical Details
Enh. Spot Element Definitions
BAdI Definitions
Description
ZYNY_BADI_DEF
BADI DEFINITIC
Interface
Implementations
BAdI Definition
ZYNY_BADI_DEF
tech.
Description
BADI DEFINITION
Usability
Multiple Use
Can only be implemented SAP-internally
Limited Filter Usage
AMDP BAdI
Instance Creation Mode
Newly Creating Instantiation
Reusing Instantiation
Context-Specific Instantiation
Call fallback if no implementation is executed
Fallback Class
Implementation Example Classes

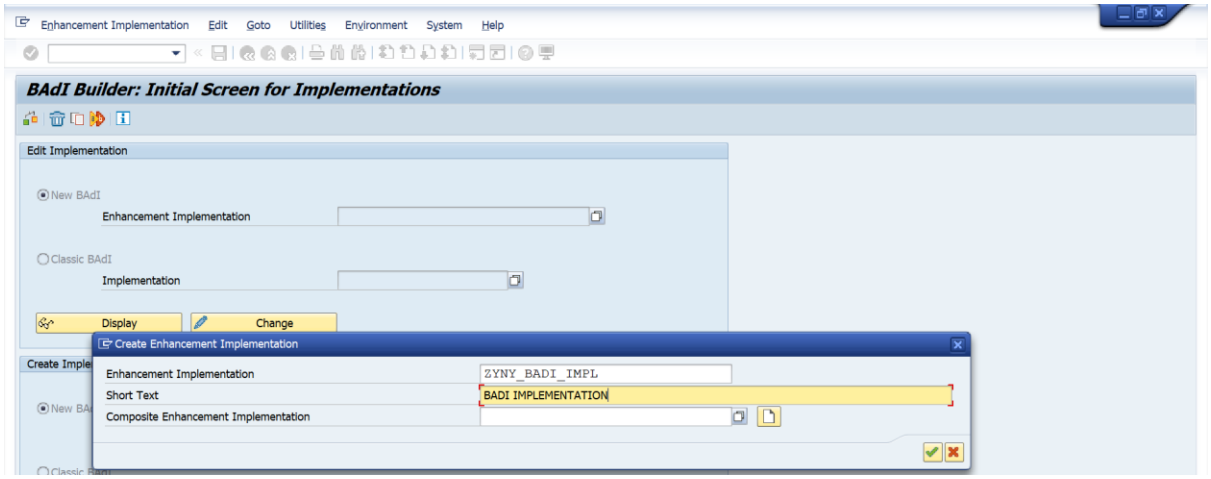

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO Change
Enhancement Spot
ZYNY_SPOT_DEMO
Inactive
Attributes
Enhancem. Implementations
Technical Details
Enh. Spot Element Definitions
BAdI Definitions
Description
ZYNY_BADI_DEF
BADI DEFINITIC
Interface
Implementations
Interface
BAdI Definition
ZYNY_BADI_DEF
Interface
ZYNY_BADI_INTERFACE

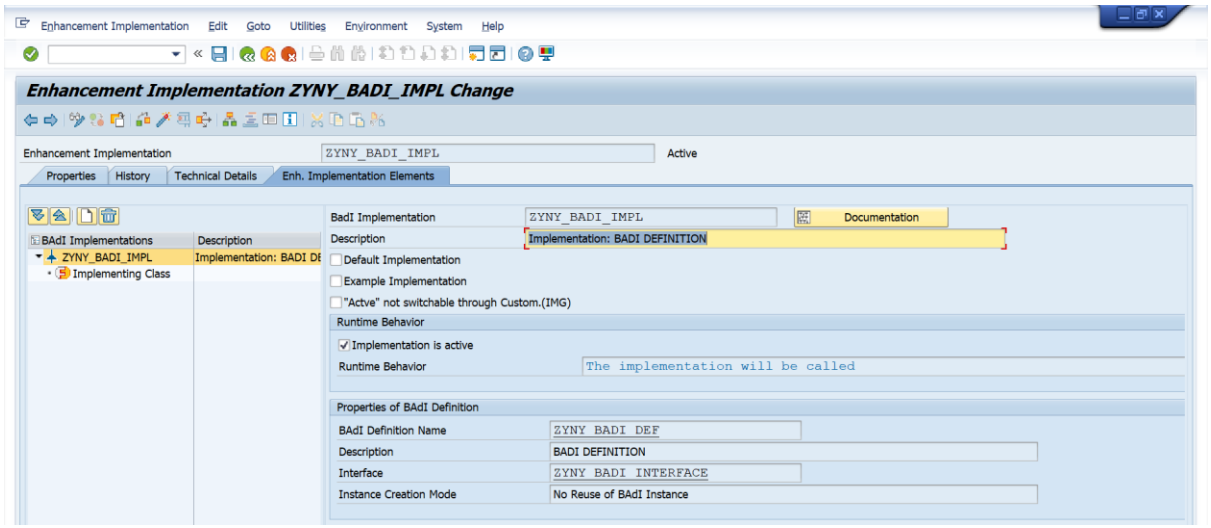

Interface Edit Goto Utilities Environment System Help
Class Builder: Change Interface ZYNY_BADI_INTERFACE
Source Code-Based
Interface documentation
Interface
ZYNY_BADI_INTERFACE
Implemented / Active
Properties
Interfaces
Attributes
Methods
Events
Types
Aliases
Parameters
Exceptions
Filter
Method
Level
Me...
Description
DIVIDE_NUMBERS
Instance Method
DIVISION OF NUMBERS

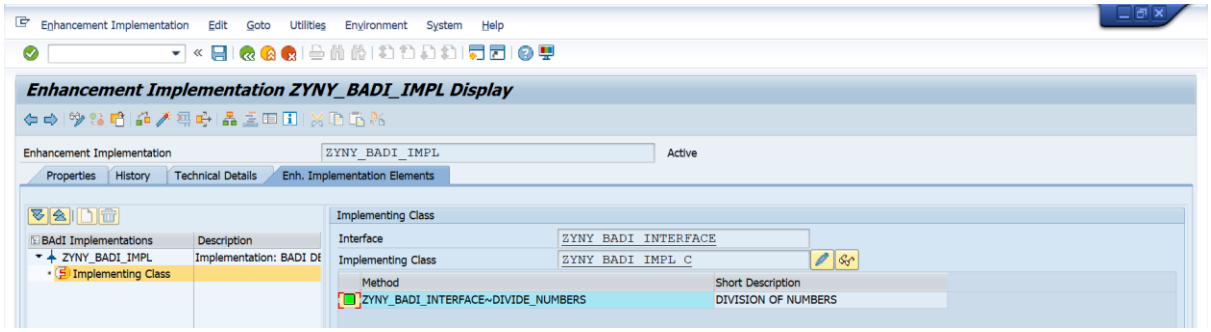


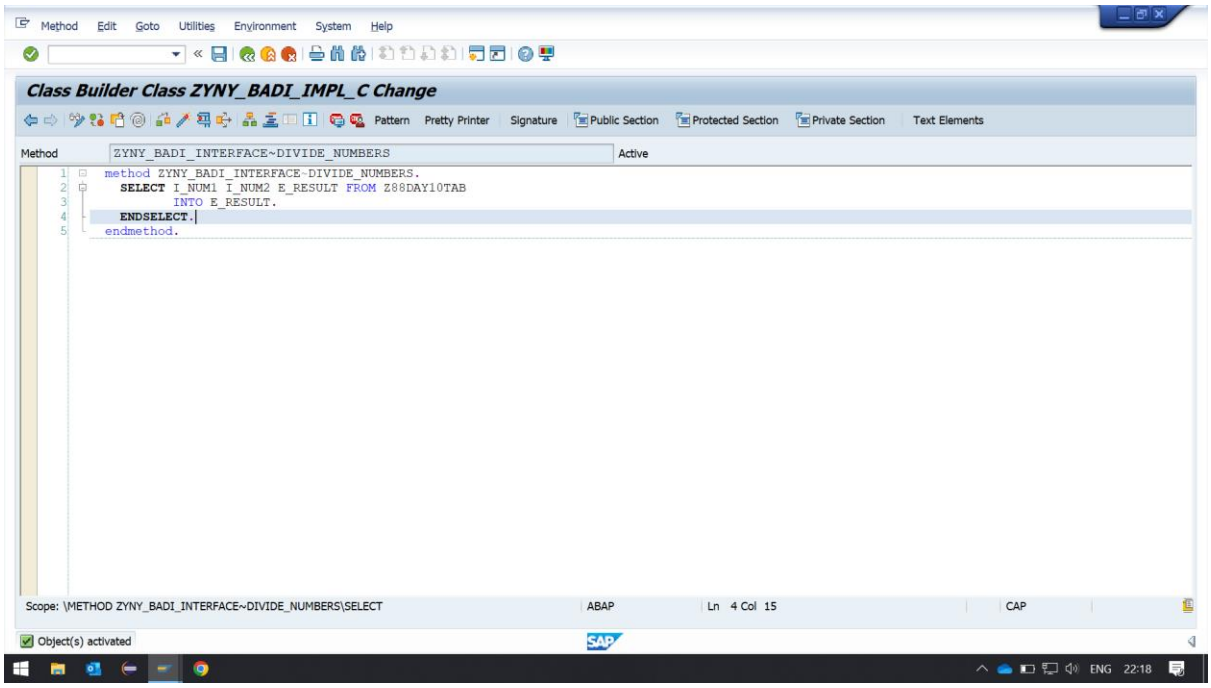
To Implement BADI Definition Go to SE19 & Create Implementation By using Enhancement spot.

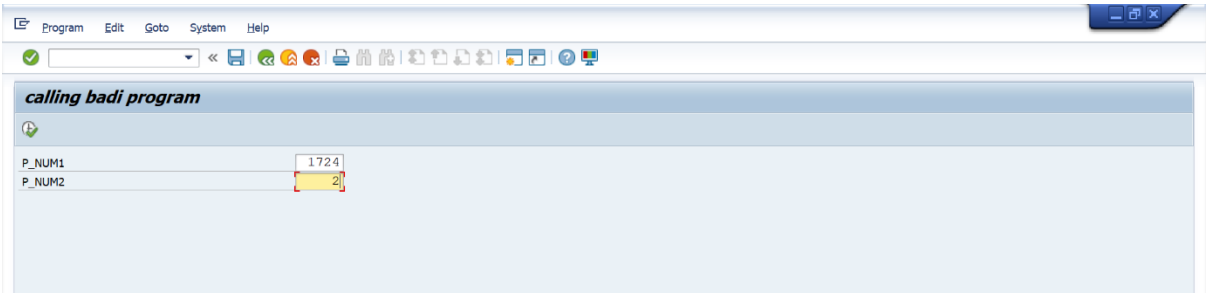


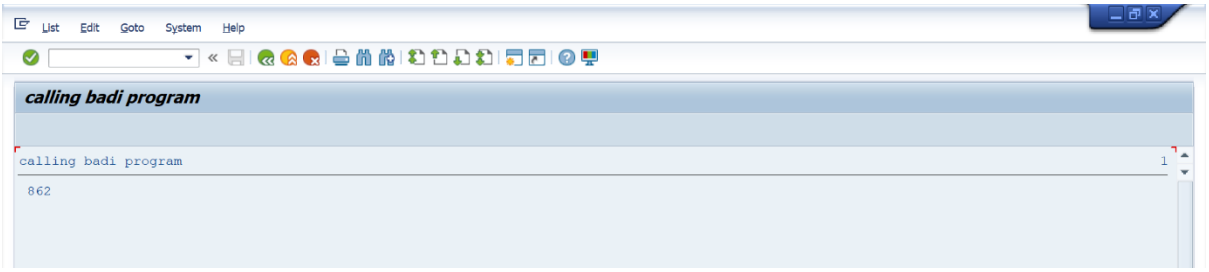



Enhancement Implementation Edit Goto Utilities Environment System Help
Enhancement Implementation ZYNY_BADI_IMPL Change
Enhancement Implementation
ZYNY_BADI_IMPL
Active
Properties
History
Technical Details
Enh. Implementation Elements
BAdI Implementations
Description
ZYNY_BADI_IMPL
Implementation: BADI DE
Implementing Class
BadI Implementation
ZYNY_BADI_IMPL
Documentation
Description
Implementation: BADI DEFINITION
Default Implementation
Example Implementation
"Actve" not switchable through Custom.(IMG)
Runtime Behavior
Implementation is active
Runtime Behavior
The implementation will be called
Properties of BAdI Definition
BAdI Definition Name
ZYNY_BADI_DEF
Description
BADI DEFINITION
Interface
ZYNY_BADI_INTERFACE
Instance Creation Mode
No Reuse of BAdI Instance


Enhancement Implementation Edit Goto Utilities Environment System Help
Enhancement Implementation ZYNY_BADI_IMPL Display
Enhancement Implementation
ZYNY_BADI_IMPL
Active
Properties
History
Technical Details
Enh. Implementation Elements
BAdI Implementations
Description
ZYNY_BADI_IMPL
Implementation: BADI DE
Implementing Class
Implementing Class
Interface
ZYNY_BADI_INTERFACE
Implementing Class
ZYNY_BADI_IMPL_C
Method
Short Description
ZYNY_BADI_INTERFACE~DIVIDE_NUMBERS
DIVISION OF NUMBERS


Method Edit Goto Utilities Environment System Help
Class Builder Class ZYNY_BADI_IMPL_C Change
Pattern
Pretty Printer
Signature
Public Section
Protected Section
Private Section
Text Elements
Method
ZYNY_BADI_INTERFACE~DIVIDE_NUMBERS
Active
method ZYNY_BADI_INTERFACE~DIVIDE_NUMBERS.
SELECT I_NUM1 I_NUM2 E_RESULT FROM Z88DAY10TAB
INTO E_RESULT.
ENDSELECT.
endmethod.
Scope: \METHOD ZYNY_BADI_INTERFACE~DIVIDE_NUMBERS\SELECT
ABAP
Ln 4 Col 15
CAP
Object(s) activated
ENG 22:18





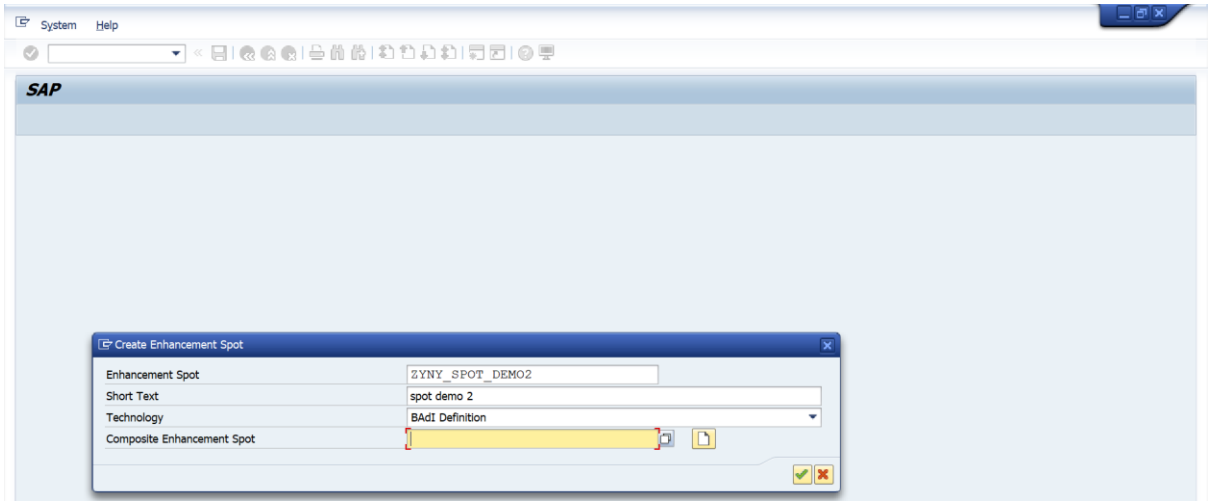
Assignment 4 – Business Add in (BADI)-Multiple Use

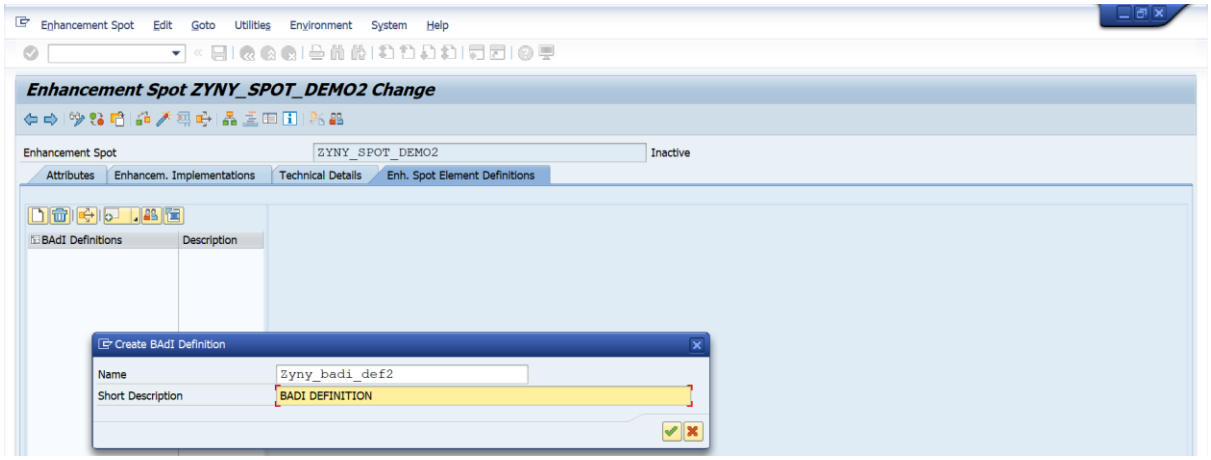
Hint:

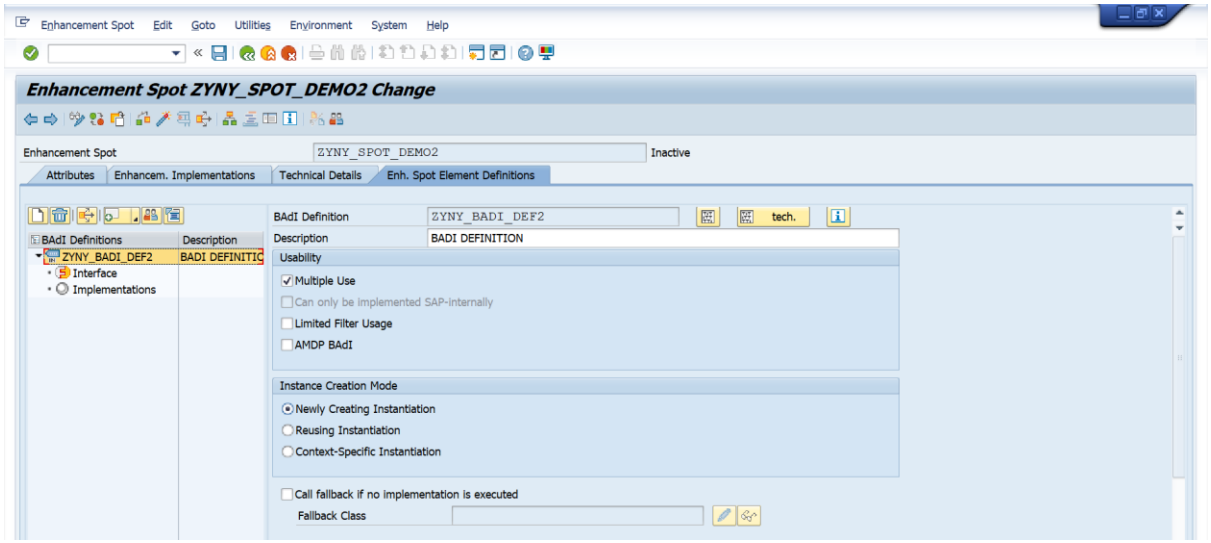
1. **SE18 should be used to define a BADI**
2. **SE19 should be used to implement the BADI Definition.**

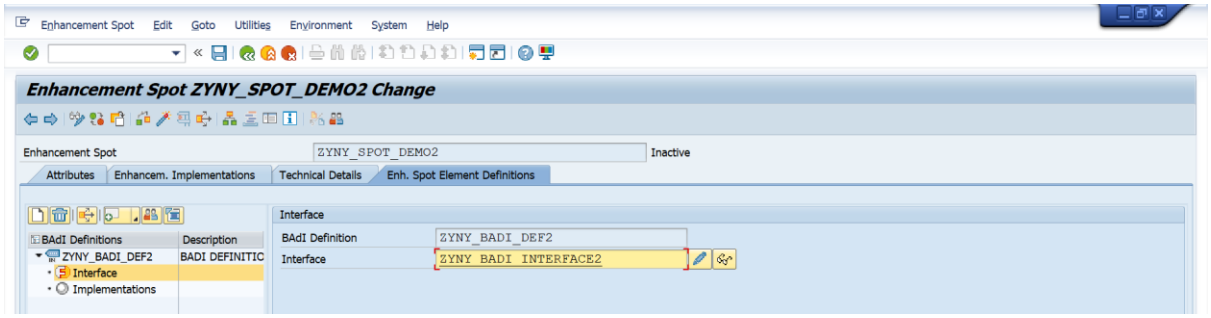
Requirement: Define and implement a custom BADI in SE18 to get Booking Data & Emailid.

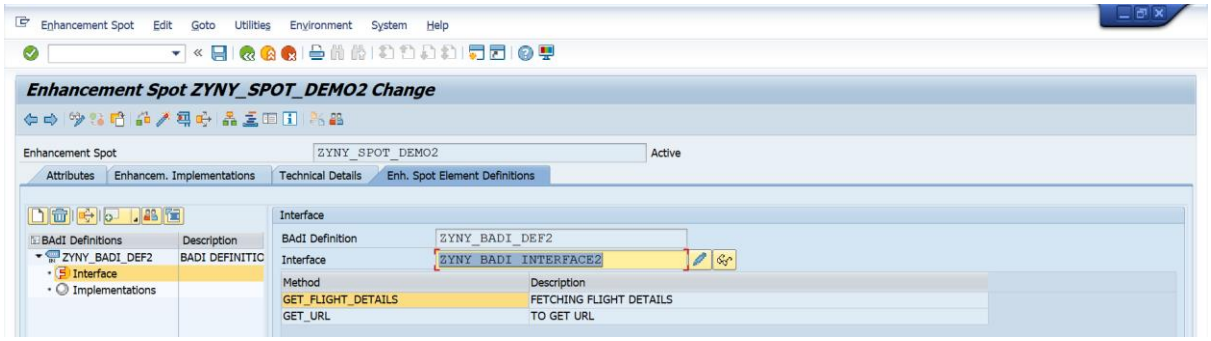
Step1: Define a BADI (ZBADI_DEMO_01…05) in SE18.
Step2: Double click on the interface created to define the methods, parameters and exceptions.
Step3: Input Carrid & Connid Table SCARR Get, Email Data.
Step4: Input Carrid & Connid Table SBOOK Get Booking Data.
Step5: Define an exception if no data is present.
Step6: Create an implementation (ZBADI_DEMO_IMP_01...05) by specifying the BADI name that was created in step1.
Step7: Create a wrapper program (ZDEMO_BADI_01…05).
Step8: Define a reference variable of type BADI interface.
Step9: Define selection screen with two parameters of type integers
Step10: Call method GET_INSTANCE of the class CL_EXITHANDLER to get the BADI instance
Step11: Call method DIVIDE_NUMBERS using this instance and pass the two selection parameters.
Create a program to display Data of Sflight
CARRID
CONNID
FLDATE
PRICE
CURRENCY
PLANETYPE
SEATSMAX
URL-SCARR---(From Badi)

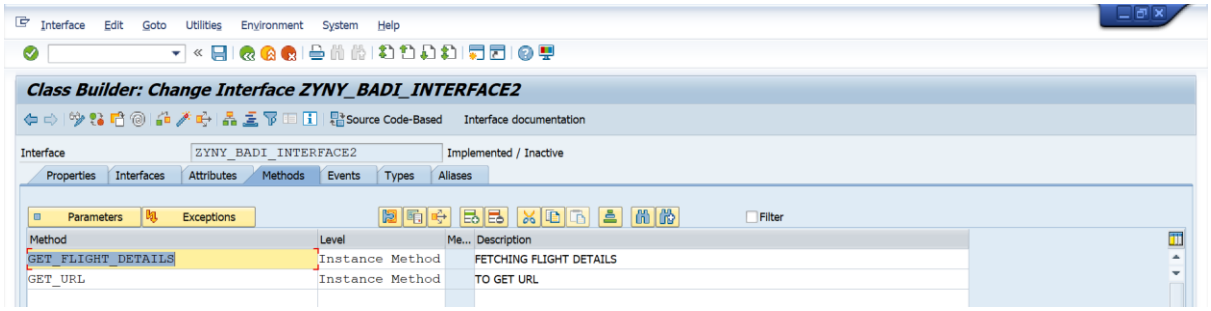

System Help
SAP
Create Enhancement Spot
Enhancement Spot
ZYNY_SPOT_DEMO2
Short Text
spot demo 2
Technology
BAdI Definition
Composite Enhancement Spot

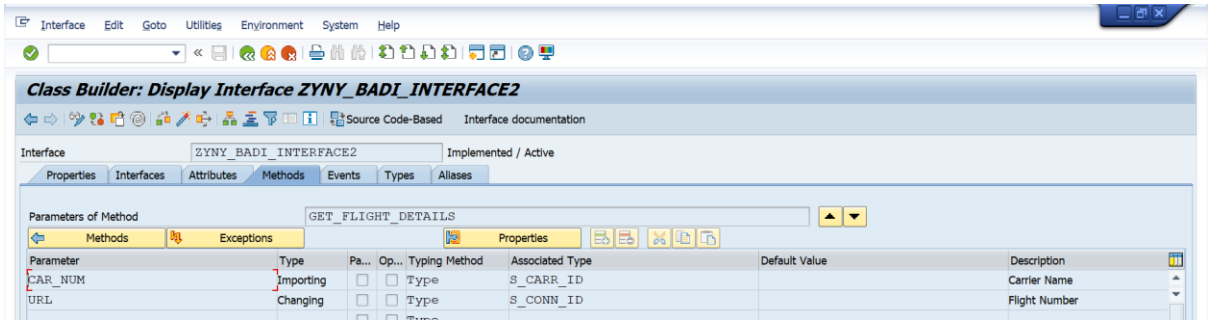

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO2 Change
Enhancement Spot
ZYNY_SPOT_DEMO2
Inactive
Attributes
Enhancem. Implementations
Technical Details
Enh. Spot Element Definitions
BAdI Definitions
Description
Create BAdI Definition
Name
Zyny_badi_def2
Short Description
BADI DEFINITION

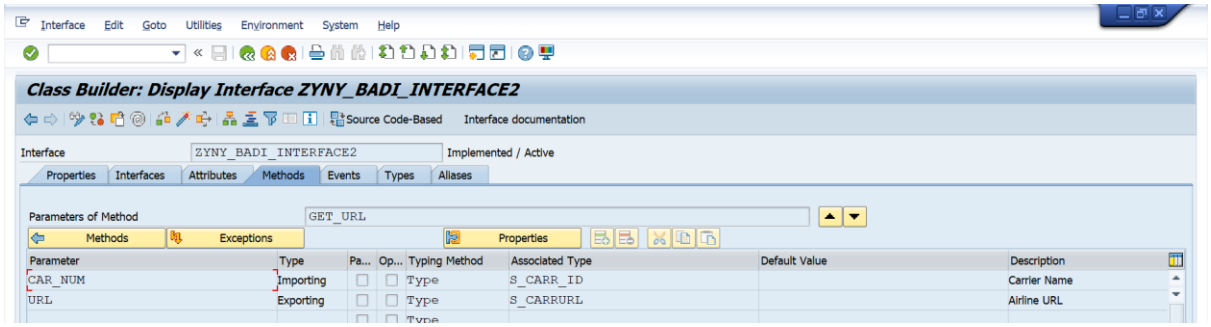

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO2 Change
Enhancement Spot
ZYNY_SPOT_DEMO2
Inactive
Attributes
Enhancem. Implementations
Technical Details
Enh. Spot Element Definitions
BAdI Definitions
Description
ZYNY_BADI_DEF2
BADI DEFINITIO
Interface
Implementations
BAdI Definition
ZYNY_BADI_DEF2
tech.
Description
BADI DEFINITION
Usability
Multiple Use
Can only be implemented SAP-internally
Limited Filter Usage
AMDP BAdI
Instance Creation Mode
Newly Creating Instantiation
Reusing Instantiation
Context-Specific Instantiation
Call fallback if no implementation is executed
Fallback Class

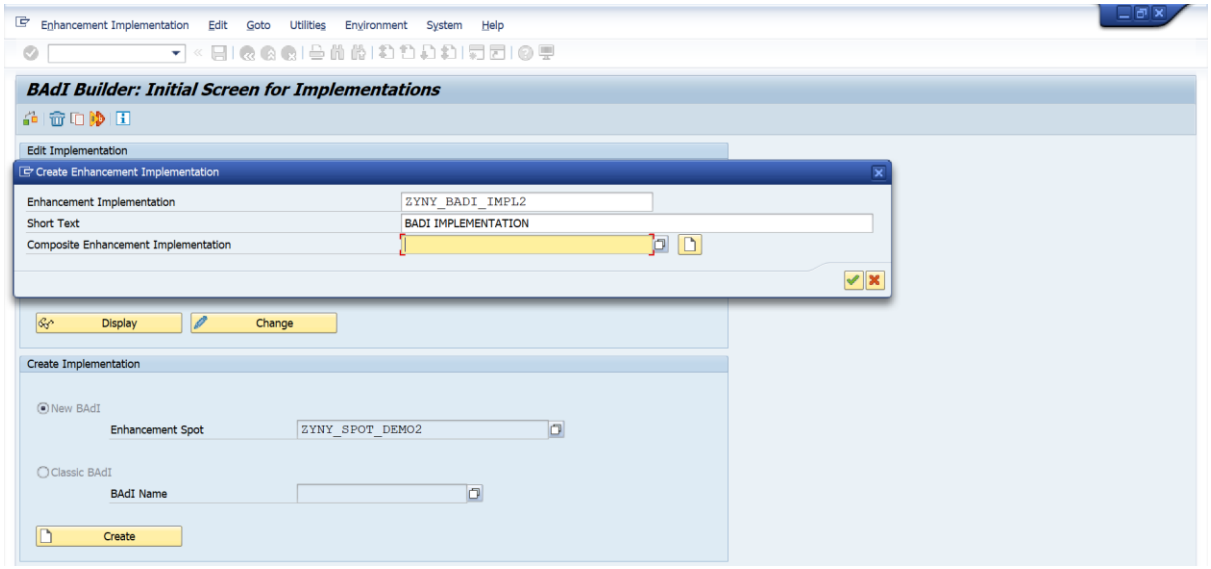

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO2 Change
Enhancement Spot ZYNY_SPOT_DEMO2 Inactive
Attributes Enhancem. Implementations Technical Details Enh. Spot Element Definitions
BAdI Definitions Description
ZYNY_BADI_DEF2 BADI DEFINITIC
Interface
Implementations
Interface
BAdI Definition ZYNY_BADI_DEF2
Interface ZYNY_BADI_INTERFACE2

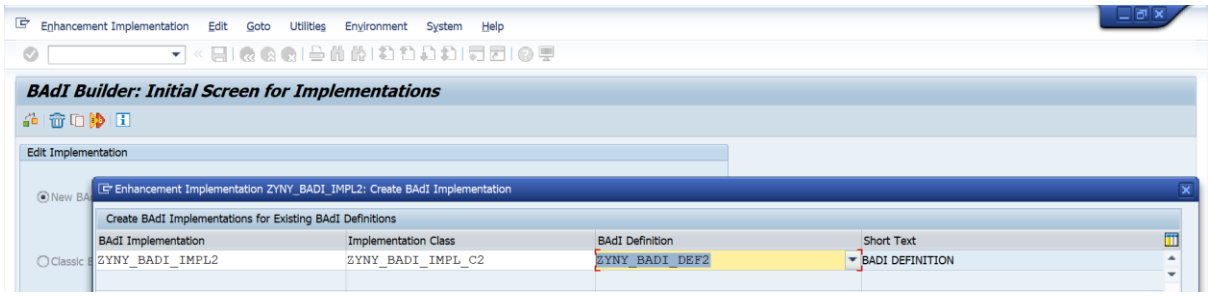

Enhancement Spot Edit Goto Utilities Environment System Help
Enhancement Spot ZYNY_SPOT_DEMO2 Change
Enhancement Spot ZYNY_SPOT_DEMO2 Active
Attributes Enhancem. Implementations Technical Details Enh. Spot Element Definitions
BAdI Definitions Description
ZYNY_BADI_DEF2 BADI DEFINITIC
Interface
Implementations
Interface
BAdI Definition ZYNY_BADI_DEF2
Interface ZYNY_BADI_INTERFACE2
Method Description
GET_FLIGHT_DETAILS FETCHING FLIGHT DETAILS
GET_URL TO GET URL

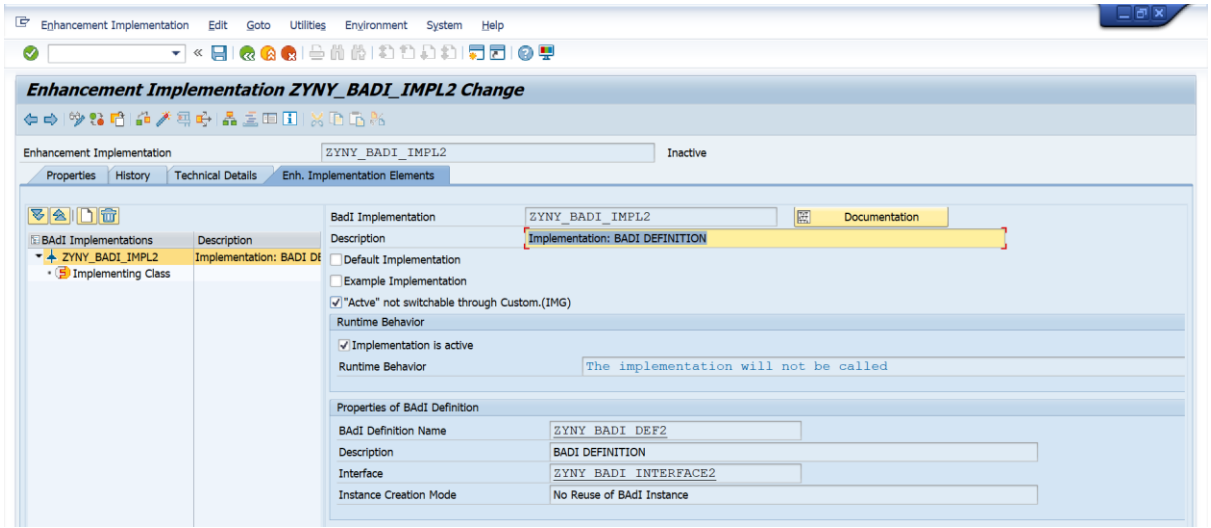

Interface Edit Goto Utilities Environment System Help
Class Builder: Change Interface ZYNY_BADI_INTERFACE2
Source Code-Based Interface documentation
Interface ZYNY_BADI_INTERFACE2 Implemented / Inactive
Properties Interfaces Attributes Methods Events Types Aliases
Parameters Exceptions
Filter
Method Level Me... Description
GET_FLIGHT_DETAILS Instance Method FETCHING FLIGHT DETAILS
GET_URL Instance Method TO GET URL

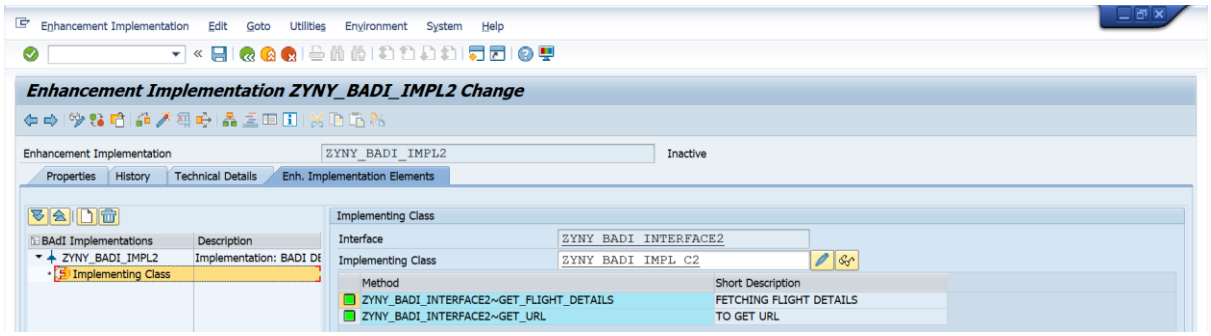

Interface Edit Goto Utilities Environment System Help
Class Builder: Display Interface ZYNY_BADI_INTERFACE2
Source Code-Based Interface documentation
Interface ZYNY_BADI_INTERFACE2 Implemented / Active
Properties Interfaces Attributes Methods Events Types Aliases
Parameters of Method GET_FLIGHT_DETAILS
Methods Exceptions Properties
Parameter Type Pa... Op... Typing Method Associated Type Default Value Description
CAR_NUM Importing Type S_CARR_ID Carrier Name
URL Changing Type S_CONN_ID Flight Number

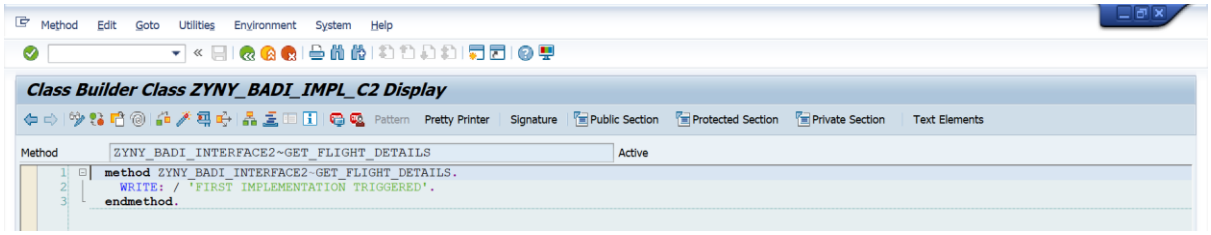

Interface Edit Goto Utilities Environment System Help
Class Builder: Display Interface ZYNY_BADI_INTERFACE2
Source Code-Based Interface documentation
Interface ZYNY_BADI_INTERFACE2 Implemented / Active
Properties Interfaces Attributes Methods Events Types Aliases
Parameters of Method GET_URL
Methods Exceptions Properties
Parameter Type Pa... Op... Typing Method Associated Type Default Value Description
CAR_NUM Importing Type S_CARR_ID Carrier Name
URL Exporting Type S_CARRURL Airline URL

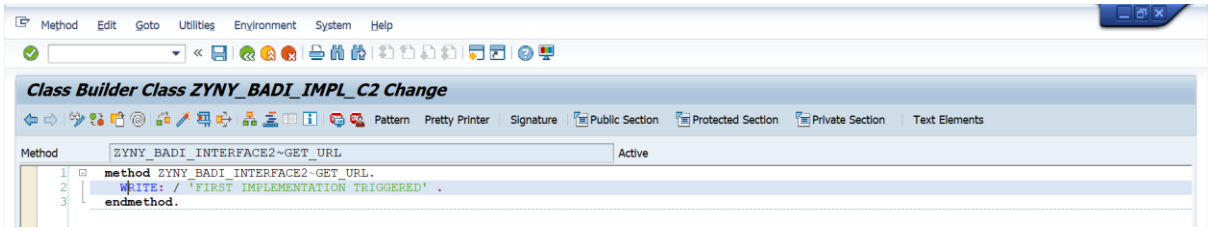

Enhancement Implementation Edit Goto Utilities Environment System Help
BAdI Builder: Initial Screen for Implementations
Edit Implementation
Create Enhancement Implementation
Enhancement Implementation ZYNY_BADI_IMPL2
Short Text BADI IMPLEMENTATION
Composite Enhancement Implementation
Display
Change
Create Implementation
New BAdI
Enhancement Spot ZYNY_SPOT_DEMO2
Classic BAdI
BAdI Name
Create


Enhancement Implementation Edit Goto Utilities Environment System Help
BAdI Builder: Initial Screen for Implementations
Edit Implementation
Enhancement Implementation ZYNY_BADI_IMPL2: Create BAdI Implementation
Create BAdI Implementations for Existing BAdI Definitions
BAdI Implementation
Implementation Class
BAdI Definition
Short Text
ZYNY_BADI_IMPL2
ZYNY_BADI_IMPL_C2
ZYNY_BADI_DEF2
BADI DEFINITION

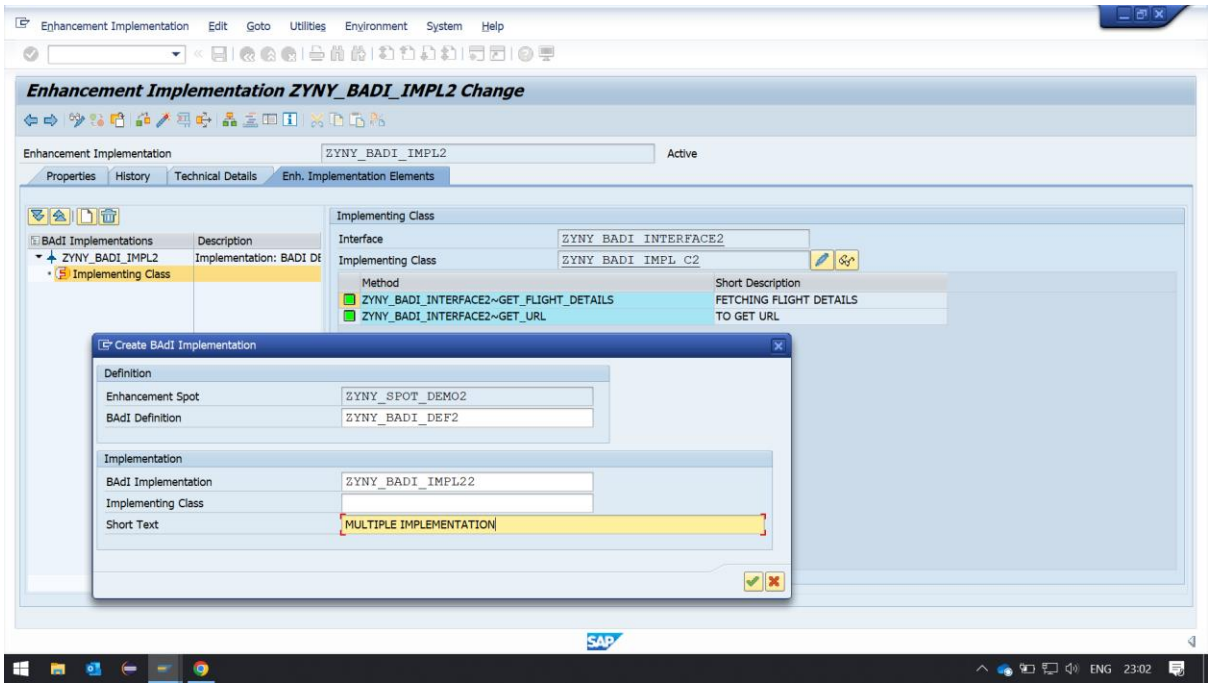

Enhancement Implementation Edit Goto Utilities Environment System Help
Enhancement Implementation ZYNY_BADI_IMPL2 Change
Enhancement Implementation ZYNY_BADI_IMPL2 Inactive
Properties History Technical Details Enh. Implementation Elements
BAdI Implementations Description
ZYNY_BADI_IMPL2 Implementation: BADI DE
Implementing Class
BadI Implementation ZYNY_BADI_IMPL2 Documentation
Description Implementation: BADI DEFINITION
Default Implementation
Example Implementation
"Actve" not switchable through Custom.(IMG)
Runtime Behavior
Implementation is active
Runtime Behavior The implementation will not be called
Properties of BAdI Definition
BAdI Definition Name ZYNY_BADI_DEF2
Description BADI DEFINITION
Interface ZYNY_BADI_INTERFACE2
Instance Creation Mode No Reuse of BAdI Instance

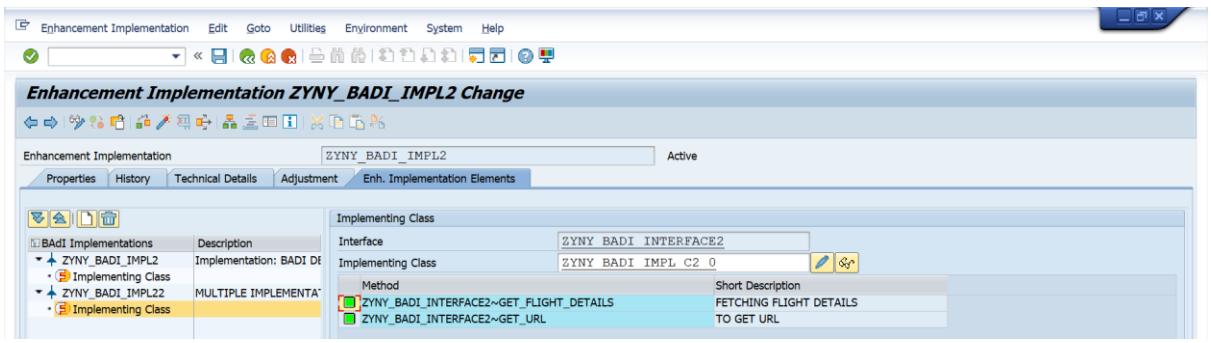

Enhancement Implementation Edit Goto Utilities Environment System Help
Enhancement Implementation ZYNY_BADI_IMPL2 Change
Enhancement Implementation ZYNY_BADI_IMPL2 Inactive
Properties History Technical Details Enh. Implementation Elements
BAdI Implementations Description
ZYNY_BADI_IMPL2 Implementation: BADI DE
Implementing Class
Implementing Class
Interface ZYNY_BADI_INTERFACE2
Implementing Class ZYNY_BADI_IMPL_C2
Method
Short Description
ZYNY_BADI_INTERFACE2~GET_FLIGHT_DETAILS FETCHING FLIGHT DETAILS
ZYNY_BADI_INTERFACE2~GET_URL TO GET URL

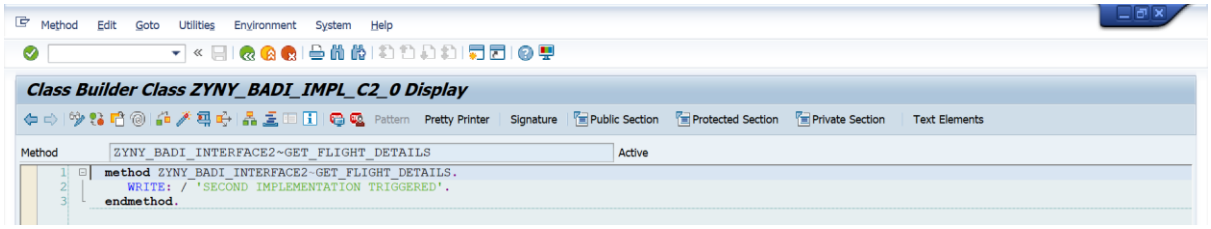


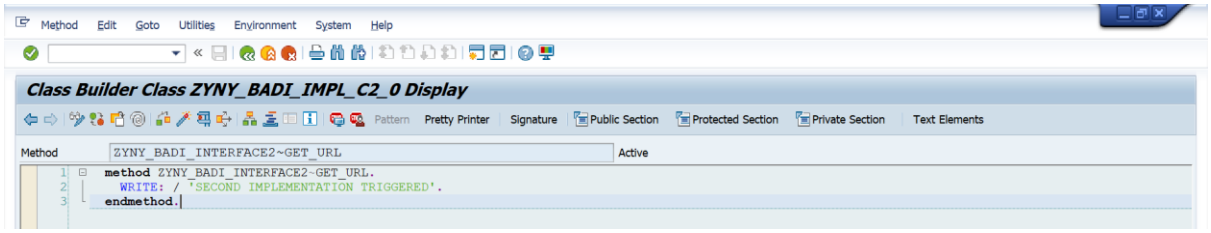


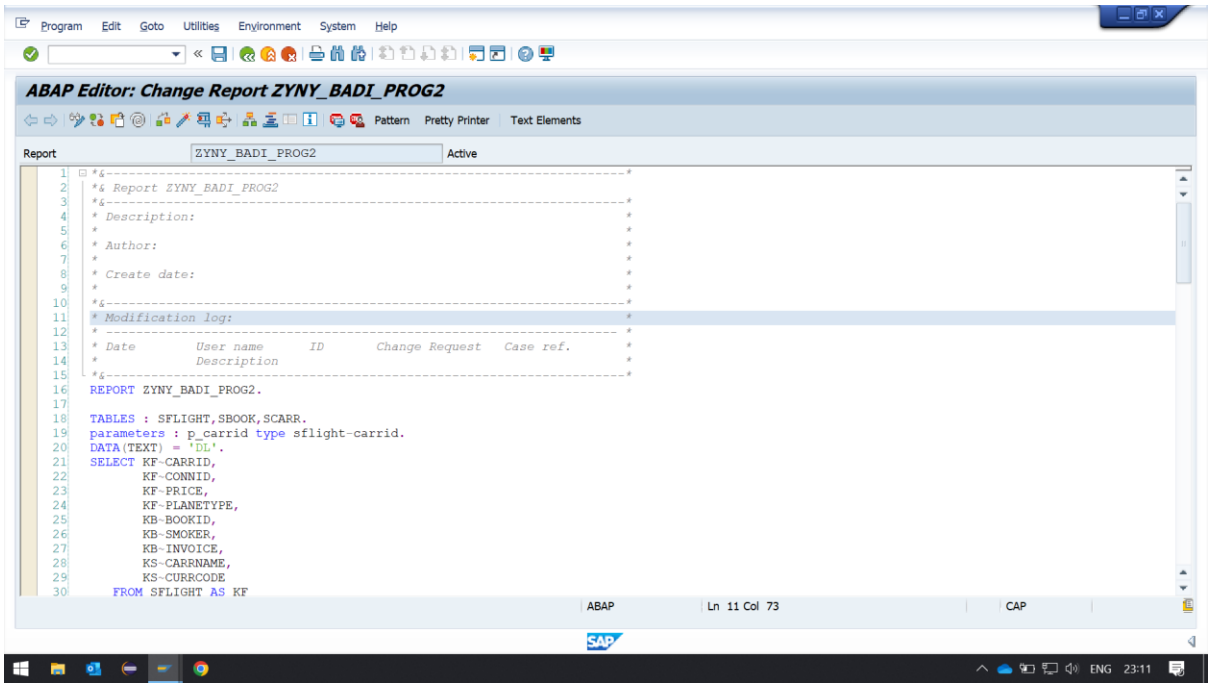
CLICK ON THE NEW BUTTON IN THE SE19







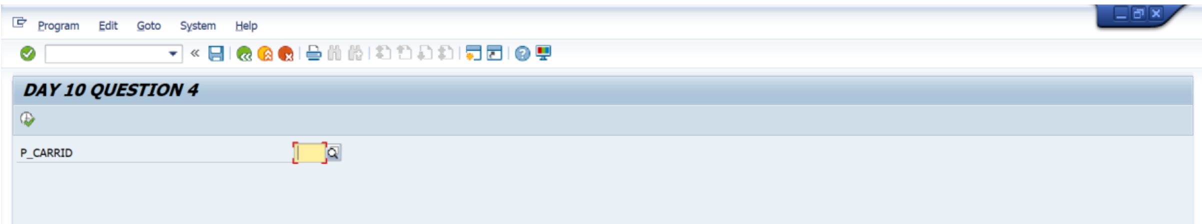


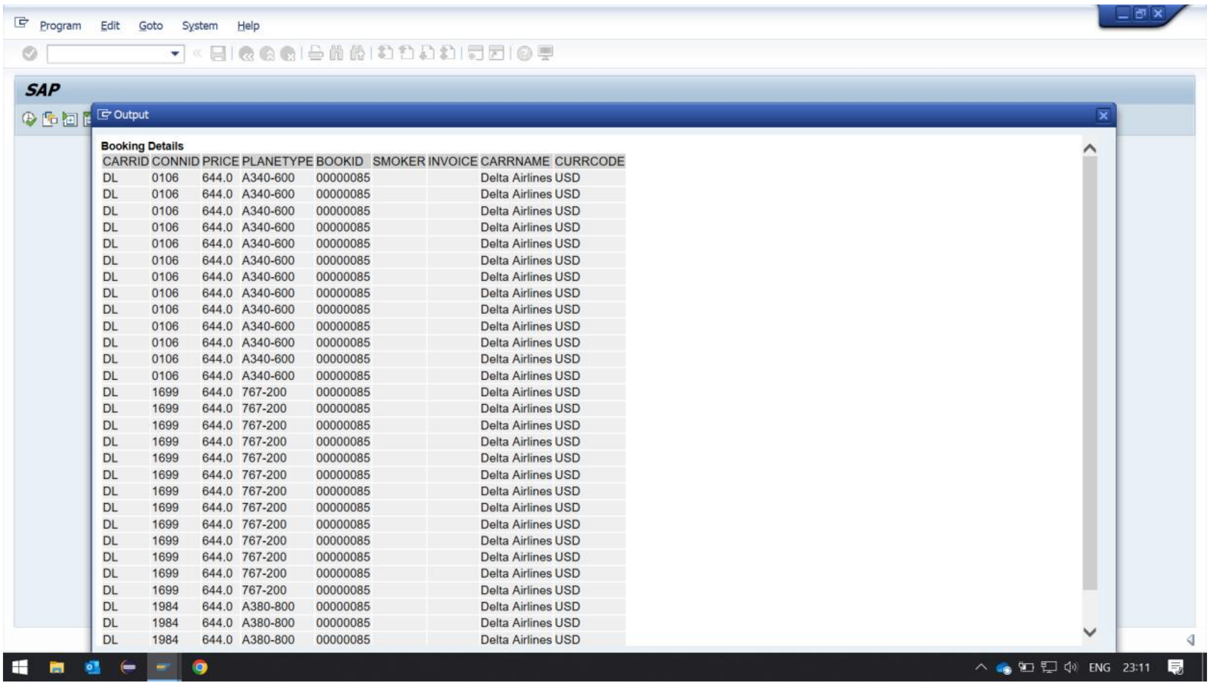



```
*&---------------------------------------------------------------------*
*& Report ZYNY_BADI_PROG2
*&---------------------------------------------------------------------*
* Description:                                                         *
*                                                                      *
* Author:                                                              *
*                                                                      *
* Create date:                                                         *
*                                                                      *
*&---------------------------------------------------------------------*
* Modification log:                                                    *
* -------------------------------------------------------------------- *
* Date         User name      ID       Change Request   Case ref.      *
*              Description                                            *
*&---------------------------------------------------------------------*
REPORT ZYNY_BADI_PROG2.

TABLES : SFLIGHT,SBOOK,SCARR.
parameters : p_carrid type sflight-carrid.
DATA(TEXT) = 'DL'.
```

```
SELECT KF~CARRID,
       KF~CONNID,
       KF~PRICE,
       KF~PLANETYPE,
       KB~BOOKID,
       KB~SMOKER,
       KB~INVOICE,
       KS~CARRNAME,
       KS~CURRCODE
   FROM SFLIGHT AS KF
  INNER JOIN SBOOK AS KB ON KF~CARRID = KB~CARRID
  INNER JOIN SCARR AS KS ON KB~CARRID = KS~CARRID
  INTO TABLE @DATA(ITAB)
  UP TO 30 ROWS
  WHERE KF~CARRID = @TEXT.
CL_DEMO_OUTPUT=>DISPLAY_DATA( VALUE = ITAB
                              NAME = 'Booking Details').
"----------------------------------------------------------------"
LOOP AT ITAB INTO DATA(WA).
  WRITE :/ WA-CARRID,(10) WA-CONNID,(15) WA-PRICE,(20) WA-
PLANETYPE,(25) WA-BOOKID,(30) WA-SMOKER.
ENDLOOP.
"----------------------------------------------------------------"
DATA(TEXT1) = 'BA'.
SELECT SINGLE
       KS~CARRNAME AS CA,
       KS~CURRCODE AS CU
   FROM SCARR AS KS
   INTO @DATA(ITAB1)
  WHERE KS~CARRID = @TEXT1.

WRITE : / 'Single record',/ ITAB1-CA, ITAB1-CU.

"----------------------------------------------------------------"

DATA(WA_KS) = ITAB[ 12 ].
CL_DEMO_OUTPUT=>DISPLAY_DATA( VALUE = WA_KS
                              NAME = 'Displaying Index Specific Data' ).

"----------------------------------------------------------------"

DATA(WA_KS1) = ITAB[ CARRID = 'DL' CONNID = '0106' ].
CL_DEMO_OUTPUT=>DISPLAY_DATA( VALUE = WA_KS1
                            NAME = 'Displaying Column Specific Data' ).

"------------------------------------------------ -------------"
DATA(TRY) =
COND STRING(
WHEN ITAB1-CA = 'British Airways' THEN
  |BA|
  ELSE |No Airlines Found| ).

WRITE :/ 'Conditional Statement Output',/ TRY.
"----------------------------------------------------------------"
TYPES : BEGIN OF TY_SFLIGHT,
          CARRID    TYPE SFLIGHT-CARRID,
          CONNID    TYPE SFLIGHT-CONNID,
```

```
          PRICE     TYPE SFLIGHT-PRICE,
        END OF TY_SFLIGHT,
itab_flight type table of TY_SFLIGHT with key carrid.

DATA(gt_flight) = VALUE itab_flight(
( carrid = 'AA' connid = '0106' price = '20000')
( carrid = 'AA' connid = '0106' price = '30000')
( carrid = 'AZ' connid = '0206' price = '10000') ).
DATA: gv_tot_age TYPE i,
       gv_avg_age TYPE decfloat34.
LOOP AT gt_flight INTO DATA(ls_flight)
  GROUP BY ( carrid  = ls_flight-carrid
                        size  = GROUP SIZE
                       index = GROUP INDEX )
  ASCENDING
  ASSIGNING FIELD-SYMBOL(<group>).
  CLEAR: gv_tot_age.
  WRITE: / |Group: { <group>-index }    Carrid: { <group>-
carrid WIDTH = 15 }|
              & |     Number in this Carrid: { <group>-size }|.
  LOOP AT GROUP <group> ASSIGNING FIELD-SYMBOL(<ls_member>).
      WRITE: /13 <ls_member>-carrid,23 <ls_member>-connid,30 <ls_member>-
price.
   ENDLOOP.

Endloop.
"-----------------------------------------------------------------"
*data(ks) = myclass=>get_select( )-carrid.
class myclass definition.
  public section.
  TYPES : BEGIN OF TY_SFLIGHT,
          CARRID    TYPE SFLIGHT-CARRID,
          CONNID    TYPE SFLIGHT-CONNID,
          PRICE     TYPE SFLIGHT-PRICE,
        END OF TY_SFLIGHT.
  data : it_flight type table of ty_sflight.
  methods : get_data
          importing im_carrid type sflight-carrid.
endclass.

class myclass implementation.
  method get_data.
    select carrid connid price
    from sflight into table it_flight
    where carrid = im_carrid.
    cl_demo_output=>display( it_flight ).
    endmethod.
endclass.
START-OF-SELECTION.
data(call_class) = new myclass( ).
create object call_class.
call_class->get_data( EXPORTING im_carrid = p_carrid ).
```





Booking Details

CARRID	CONNID	PRICE	PLANETYPE	BOOKID	SMOKER	INVOICE	CARRNAME	CURRCODE
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	0106	644.0	A340-600	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1699	644.0	767-200	00000085			Delta Airlines	USD
DL	1984	644.0	A380-800	00000085			Delta Airlines	USD
DL	1984	644.0	A380-800	00000085			Delta Airlines	USD
DL	1984	644.0	A380-800	00000085			Delta Airlines	USD