SAP ABAP Interview Questions Part 1

Looking for ABAP interview questions? You have come to THE RIGHT place. I have planned to continuously update this blog post. So if you have been appearing for interviews recently , share your experiences in the comments below:

Let's make this list count and add some value to everyone.
All the best for your interview preparation . J Here you go!!

SAP ABAP interview questions:

Important

Question 1: What is the difference between User Exit and Function Exit?

User Exit	Customer Exit
User exit is implemented in the form of a Subroutine i.e. PERFORM xxx. · Example: INCLUDE MVF5AFZZ à · PERFORM userexit_save_document_prepare. · ·	A customer exit can be implemented as: · Function exit · Screen Exit · Menu Exit · Field Exit Example: CALL Customer function 'xxx' INCLUDE xxx. You modify this include.
In case of a PERFORM, you have access to almost all the data. So you have better control, but more risk of making the system unstable.	You have access only to the importing, exporting, changing and tables parameter of the Function Module. So you have limited access to data.
User exit is considered a modification and not an enhancement.	A customer exit is considered an enhancement.
You need Access Key for User Exit.	You do not need access key.
Changes are lost in case of an upgrade.	Changes are upgrade compatible.
User exit is the earliest form of change option offered by SAP.	Customer exits came later and they overcome the shortcomings of User Exit.
No such thing is required here.	To activate a function exit, you need to create a project in SMOD and activate the project.

What is the difference between RFC and BAPI?

BAPI	RFC
Just as Google offers Image/Chart/Map APIs OR Facebook offers APIs for Comment/Like,	RFC is nothing but a remote enabled function module. So if there is a Function Module in

SAP offers APIs in the form of BAPIs. BAPI is a library of function modules released by SAP to the public so that they can interface with SAP.	SAP system 1 on server X , it can be called from a SAP system 2 residing on server Y.
There is a Business Object Associated with a BAPI. So a BAPI has an Interface, Key Field, Attributes, Methods, and Events.	No Business Object is associated with a RFC.
Outside world (JAVA, VB, .Net or any Non SAP system) can connect to SAP using a BAPI.	Non–SAP world cannot connect to SAP using RFC.
Error or Success messages are returned in a RETURN table.	RFC does not have a return table.

Question 3:What is the difference between SAPSCRIPT and SMARTFORM?

SAPSCRIPT	SMARTFORM
SAPSCRIPT is client dependent.	SMARTFORM is client independent.
SAPSCRIPT does not generate any Function module.	SMARTFORM generates a Function Module when activated.
Main Window is must.	You can create a SMARTFORM without a Main Window.
SAPSCRIPT can be converted to SMARTFORMS. Use Program SF_MIGRATE.	SMARTFORMS cannot be converted to SCRIPT.
Only one Page format is possible	Multiple page formats are possible.
Such thing is not possible in SCRIPT.	You can create multiple copies of a SMARTFORM using the Copies Window.
PROTECT ... ENDPROTECT command is used for Page protection.	The Protect Checkbox can be ticked for Page Protection.

The way SMARTFORM is developed and the way in which SCRIPT is developed is entirely different. Not listing down those here. That would be too much.

Question 4:What is the difference between Call Transaction Method and the Session method ?

Session Method	Call Transaction
Session method id generally used when the data volume is huge.	Call transaction method is when the data volume is low
Session method is slow as compared to Call transaction.	Call Transaction method is relatively faster than Session method.
SAP Database is updated when you process the sessions. You need to process the sessions separately via SM35.	SAP Database is updated during the execution of the batch input program.
Errors are automatically handled during the processing of the batch input session.	Errors should be handled in the batch input program.

Question 5: What is the difference between BDC and BAPI?

BAPI	BDC
BAPI is faster than BDC.	BDC is relatively slower than BAPI.
BAPI directly updates database.	BDC goes through all the screens as a normal user would do and hence it is slower.
No such processing options are available in BAPI.	Background and Foreground processing options are available for BDC.
BAPI would generally used for small data uploads.	BDCs would be preferred for large volumes of data upload since background processing option is available.
For processing errors, the Return Parameters for BAPI should be used. This parameter returns exception messages or success messages to the calling program.	Errors can be processed in SM35 for session method and in the batch input program for Call Transaction method.

Question 6: What is the difference between macro and subroutine?

Macro	Subroutine
Macro can be called only in the program it is defined.	Subroutine can be called from other programs also.
Macro can have maximum 9 parameters.	Can have any number of parameters.
Macro can be called only after its definition.	This is not true for Subroutine.
A macro is defined inside: DEFINE ... . END-OF-DEFINITION.	Subroutine is defined inside: FORM .... ENDFORM.
Macro is used when same thing is to be done in a program a number of times.	Subroutine is used for modularization.

Question 7: What is the difference between SAP memory and ABAP memory?

SAP Memory	ABAP Memory
When you are using the SET/GET Parameter ID command, you are using the SAP Memory.	When you are using the EXPORT IMPORT Statements, you are using the ABAP Memory.
SAP Memory is User Specific. What does this mean?àThe data stored in SAP memory can be accesses via any session from a terminal.	ABAP Memory is User and Transaction Specific. What does this mean?à The data stored in ABAP memory can be accessed only in one session. If you are creating another session, you cannot use ABAP memory.

Important
Question 8: What is the difference between AT SELECTION-SCREEN and AT SELECTION-SCREEN OUTPUT?
AT SELECTION-SCREEN is the PAI of the selection screen whereas
AT SELECTION-SCREEN OUTPUT is the PBO of the selection screen.

Question 9: What is the difference between SY-INDEX and SY-TABIX?
Remember it this way à TABIX = Table.
So when you are looping over an internal table, you use SY-TABIX.
When you use DO … ENDDO / WHILE for looping, there is no table involved.
So you use SY-INDEX.

For READ statement, SY-INDEX is used.

Question 10: What is the difference between VIEW and a TABLE?A table physically stores data.
A view does not store any data on its own. It can contain data from multiple tables and it just accesses/reads data from those tables.

Question 11: What is the difference between Customizing and Workbench request?A workbench request is client independent whereas a Customizing request is client dependent.
Changes to development objects such as Reports, Function Modules, Data Dictionary objects etc. fall under Workbench requests.

Changes in SPRO / IMG that define system behavior fall under customizing requests.
An example would be 'defining number ranges' in SPRO.

In short, generally a developer would end up creating a Workbench request and a Functional Consultant would create a Customizing request.
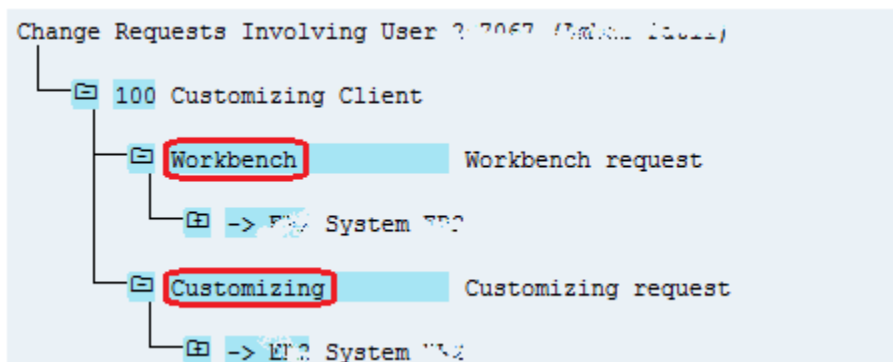
[http://2.bp.blogspot.com/-VPCruOTgcl4 /T_dGBAuZMGI/AAAAAAAAHK4/z3ZIjCouR-U/s1600/1.png]

Question 12: What is the difference between PASS BY VALUE and PASS BY REFERENCE?These
concepts are generally used for Function modules or Subroutines etc. and their meaning can be taken literally.

Say we are passing a variable lv_var:
CALL FUNCTION 'DEMO_FM'

```
  EXPORTING
    VAR  = lv_var.
```

When we PASS lv_var by VALUE , the actual value of lv_var is copied into VAR.
When we PASS lv_var by REFERENCE , the reference or the memory address of lv_var is passed to the
Function module. So VAR and lv_var will refer to the same memory address and have the same value.

Question 13: What is the difference between Master data and Transaction data?Master data is data
that doesn't change often and is always needed in the same way by business.
Ex: One time activities like creating Company Codes, Materials, Vendors, Customers etc.

Transaction data keeps on changing and deals with day to day activities carried out in business.
Transactions done by or with Customers, Vendors, and Materials etc. generate Transaction Data. So data
related to Sales, Purchases, Deliveries, Invoices etc. represent transaction data

Some important transactions here for Master Data:
Material: MM01 MM02 MM03
Vendor: XK01 , XK02 , XK03
Customer: Xd01 , XD02 , XD03

Some Important transactions for Transaction data:
Purchase Order: ME21n , ME22n , ME23n
Sales Order: VA01 , VA02 , VA03
Goods Receipt: MIGO
Invoices: MIRO

Important
Question 14: What will you use SELECT SINGLE or SELECT UPTO 1 ROWS ?
What will you use SELECT SINGLE or SELECT UPTO 1 ROWS ?
There is great confusion over this in the SAP arena.
If you Google, you will see lots of results that will say SELECT SINGLE is faster and efficient than SELECT
UPTO 1 ROWS.
But that is 100% incorrect.

SELECT UPTO 1 ROWS is faster than SELECT SINGLE.
If for a WHERE condition, only one record is present in DB, then both are more or less same.
However, If for a WHERE condition multiple records are present in DB, SELECT UPTO 1 ROWS will
perform better than SELECT SINGLE.

Question 15: What is the difference between .Include Structure and .Append structure?
I have seen ridiculous answers for this at many places on the Web.
The true answer is this:

Let's say you want to use the Structure X in your table Y.
With **.Include X**, you can include this structure in multiple tables.
With **.Append X**, you specify that structure X has been used in table Y and that this cannot be used in any
other table now. So you restrict structure X only to Table Y.

Important

Question 16: Can you describe the events in ABAP?

LOAD-OF-PROGRAM:
INITIALIZATION: If you want to initialize some values before selection screen is called
AT SELECTION SCREEN OUTPUT: PBO for Selection Screen
AT SELECTION SCREEN: PAI for Selection Screen
START-OF-SELECTION
END-OF-SELECTION
TOP-OF-PAGE
END-OF-PAGE

AT USER-COMMAND: When user click on say buttons in application toolbar. **SY-UCOMM**
AT LINE SELECTION: Double click by user on basic list. **SY-LISEL**
AT PF##: When User Presses any of the Function Keys
TOP-OF-PAGE DURING LINE SELECTION

Question 17:

What events do you know in Module Pool Programming?
PBO: you know this . If not you should know this . That's basic.
PAI: You know this. If not you should know this . That's basic.
POV: Process on Value request ... i.e. when you press F4.
POH: Process on help request ... i.e. when you press F1.

Question 18: Can you show multiple ALVs on a Single Screen?
Yes, there are multiple ways of doing this:
- · If you are using OOALV, you can create multiple custom containers (*cl_gui_custom_container*) & put an ALV control **(cl_gui_alv_grid)** in each of those.
- · You can even use a Splitter container control and place multiple ALVs in each of the split container.
- · If you are using Normal ALV, You can use the following FMS:
    1. REUSE_ALV_BLOCK_LIST_INIT
    2. REUSE_ALV_BLOCK_LIST_APPEND
    3. REUSE_ALV_BLOCK_LIST_DISPLAY

Question 19: A system has two clients 100 and 500 on the same application server. If you make changes to a SAPSCRIPT on client 100, will the changes be available in client 500?

No. SAPSCRIPT is client dependent. You will have to transport changes from client 100 to client 500. However, for SMARTFORMS, Changes will be made both for client 100 and client 500.

Question 20: There are 1000's of IDOCs in your system and say you no longer need some of them? How will you get rid of those IDOCs?

One way is to archive the IDOCs using transaction **SARA**.
But what the interviewer was expecting was 'How do you change IDoc Status'?
There are different ways of doing this:

A) Use FM **IDOC_STATUS_WRITE_TO_DATABASE**

B) USE FMs:
   EDI_DOCUMENT_OPEN_FOR_PROCESS and
   EDI_DOCUMENT_CLOSE_PROCESS

Question 21: What is the difference between CHAIN ... ENDCHAIN and FIELD commands in Module Pool?

If you want to validate a single field in Module Pool, you use the FIELD Command.
On error, this single filed is kept open for input.

If you however want to validate multiple fields, you can use the CHAIN ... ENDCHAIN command. You specify multiple fields between CHAIN and ENDCHAIN.
On error, all fields between CHAIN ...... ENDCHAIN are kept open for input.

Question 22: What are the types of Function Modules? What is an UPDATE function module? There are three types of Function Modules: **Normal , RFC , UPDATE.**
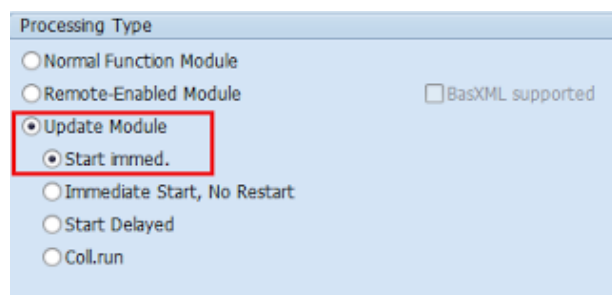
[http://1.bp.blogspot.com/-ZCpYeaFc-YE/T_7c3jHlt9I
/AAAAAAAAHLE/qz5mImUw03o/s1600/1.png]

The aim of the Update function module is either to COMMIT all changes to database at once or to ROLLBACK all the changes. By definition, an update function module is used to bundle all the updates in your system in one LUW (logical unit of work).

This FM is called whenever COMMIT WORK statement is encountered in the calling program and the way you call it is *CALL FUNCTION XXX IN UPDATE TASK*.

Have a look at FM EDI_DOCUMENT_CLOSE_PROCESS_UPD and do a where used.
This FM is used as Update FM in case you make changes to IDoc contents/status via your program.

Question 23: How is the table sorted when you do not specify field name and Ascending or Descending? On what criteria will the table be sorted? Do internal table have keys?

Yes, internal table have keys.
The default key is made up of the non-numeric fields of the table line in the order in which they occur.

Question 24: Explain what is a foreign key relationship? Explain this with the help of an example.

Let's discuss about tables EKKO (PO header) and EKPO (PO line item).
Can you have an entry in table EKPO without having an entry in table EKKO?
In other words can you have PO line items without the PO header?

How does this happen? The answer is foreign key relationship.
So foreign keys come into picture when you define relationship between two tables.
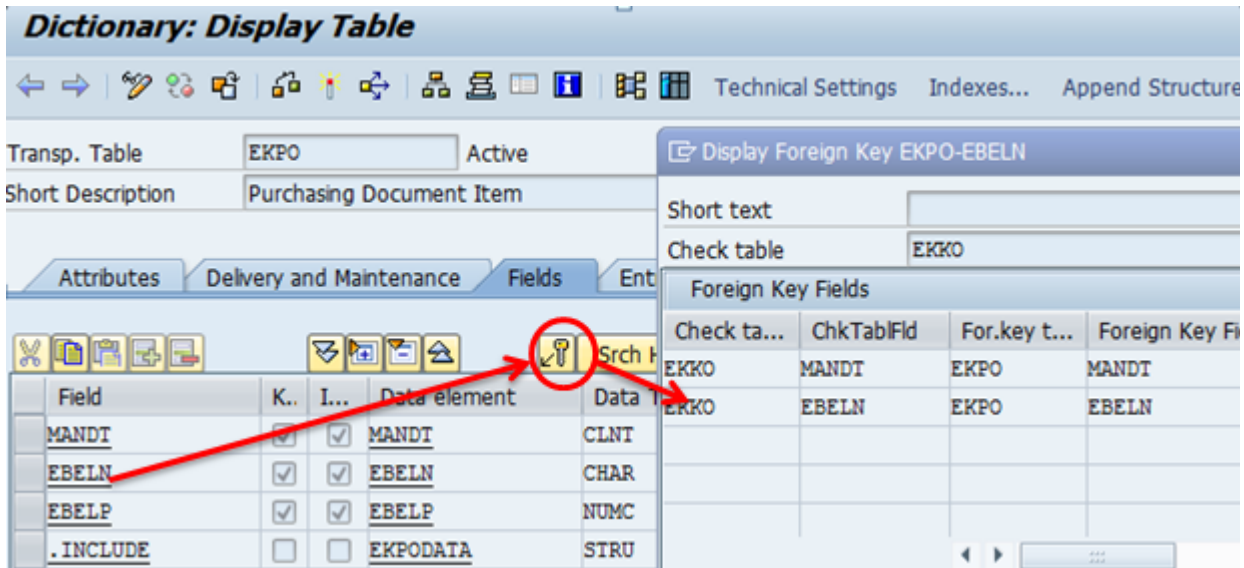
[http://4.bp.blogspot.com/-g_I9hH-_eCI/UAFB1pb6RDI/AAAAAAAAHLU/ib5vTWgScp0/s1600/2.png]

 Foreign keys are defined at field level.
Check the foreign key relation for field EBELN of table EKPO.
The check table is EKKO. This just means that whenever an entry is made in EKPO, it is checked whether the entered value for EBELN already exists in EKKO. If not, entry cannot be made to EKPO table.

Question 25 : What is the difference between a value table and a check table?Check table is maintained when you define foreign key relationships.
For Check table, read question above.
.
Value table is defined and maintained at a domain level.
At a domain level, you can mention allowed values in the form of:
1) Single values
2) Ranges
3) Value tableFor example, have a look at domain SHKZG. Only allowed values are S and H for Debit/Credit indicator. Whenever and wherever you use this domain, the system will force you to use only these two values: S and H.

Another example is domain MATNR. For this domain the value table is MARA.
So whenever and wherever, you use this domain the system will force you to use values for MATNR in table MARA.

[http://4.bp.blogspot.com/-v9Flr8jjKpI/UAFCpRScR3I/AAAAAAAAHLc/ls_5qochK28/s1600/1.png]

Question 26: H**ow do you find BAPI?** *Approach1:*
You can go to Transaction BAPI and then search for your desired object.
Say you want to find a BAPI for creating users in the system, in such case you can search for the 'User' and find the relevant BAPIs.

Approach2:
Another way is to find a Business Object. Say you want to find a BAPI for creating Material in SAP and you know the BO for Material is BUS1001006. You can go to Transaction SWO1 and enter the BO BUS1001006 in the BOR. Then have a look at the methods for this BO.

[http://1.bp.blogspot.com/-cYtwwP8kDBA/UAFPpLUwQeI/AAAAAAAAHLo/iwOF59sSPKg/s1600/2.png]

Important

Question 27: How do you find BADI?

Approach1:

Go to **Class CL_EXITHANDLER** in SE24 ---> Put a breakpoint in method **GET_INSTANCE.**Now go and execute your transaction code for which you want to find BADI.

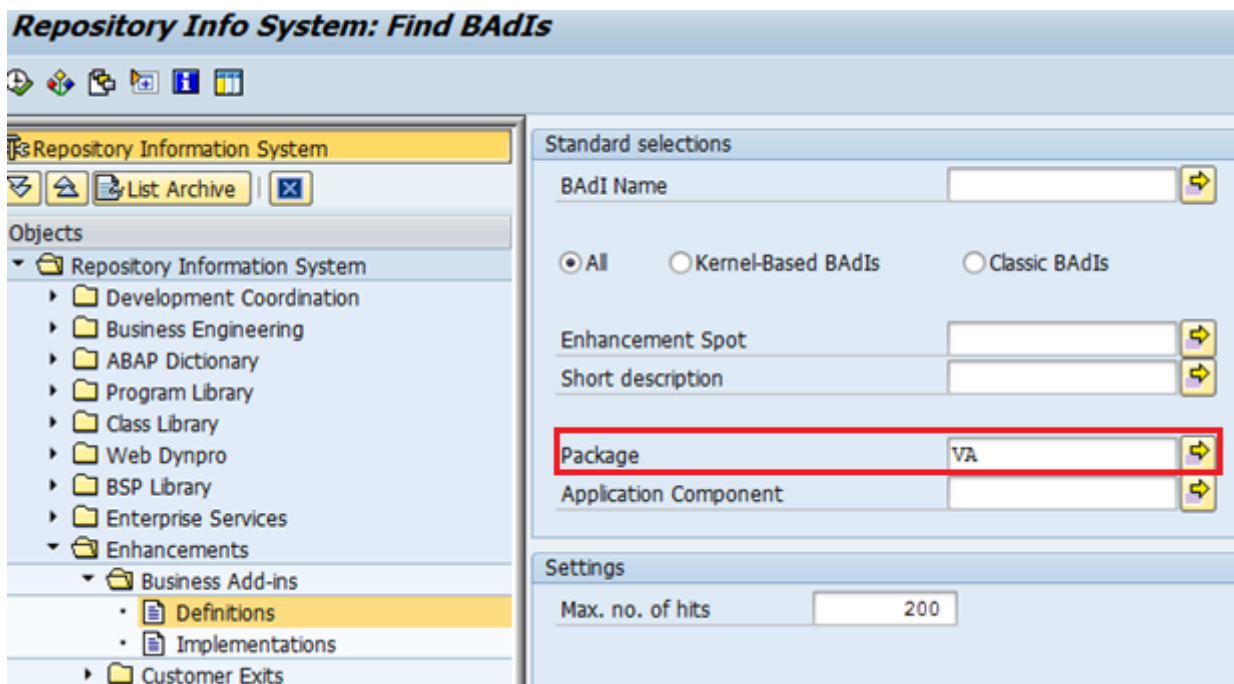You will find the BADI in the changing **parameter exit_name**:

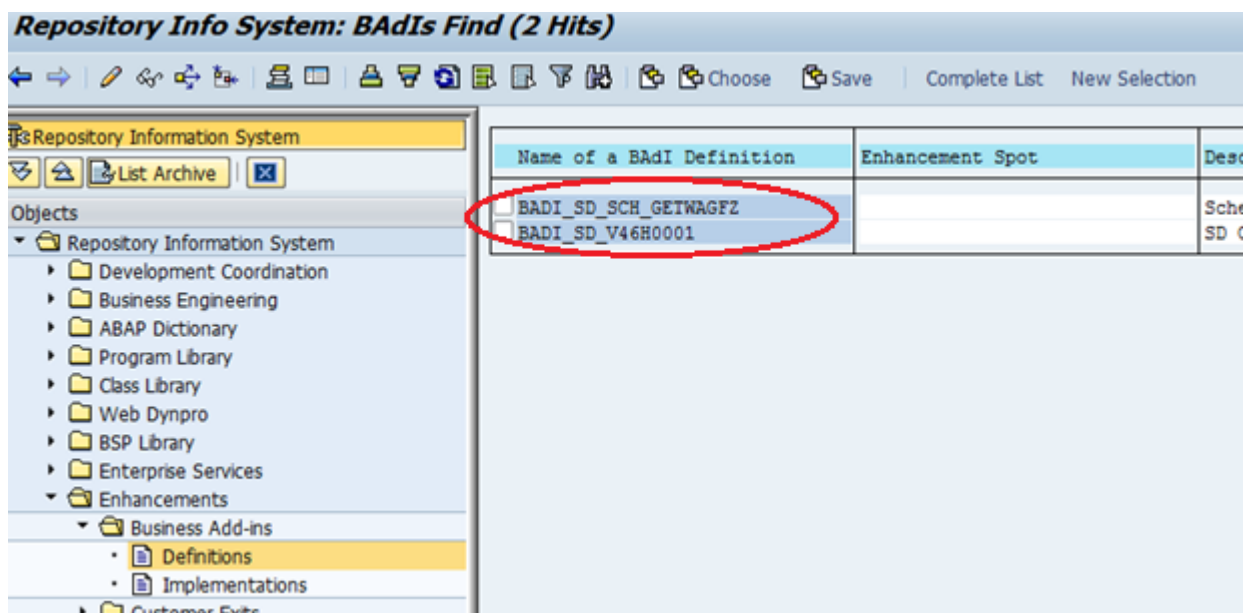/-2ZGvKrGIltk/UAFQzGID4gI/AAAAAAAAHLw/XLBSYDdAebU/s1600/2.png]

Approach 2:
Go to Tcode SE84 à Enhancements àBADIs à Definitions.
Find the package for the Tcode for which you are finding the BADI.
Enter it as shown and hit execute:

[http://4.bp.blogspot.com/-pInZPeLco0A/UAFhG19_ZHI/AAAAAAAAHL8/qvUy0j2-BYw/s1600/2.png]

[http://3.bp.blogspot.com/-lxNRUk676cg/UAFhdH_MAfI/AAAAAAAAHME/rGIBXEsKEF0/s1600/2.png]
Are we done yet ? Definitely not !
Let the questions come and lets keep on updating this blog.

I will update the blog with the following questions soon:
Question: Synchronous and asynchronous methods in BDC ?
Question: What is the difference between inner joins and outer joins?
Question: What is the difference between INSTANCE methods and STATIC methods?
Question: What is the difference between Implicit Enhancements and Explicit Enhancements?

Question: What is the difference between Enhancement point and Enhancement Section?
Question: How do you find Function Exit?
Question: How do you activate a Function Exit?

If you have been appearing for ABAP interviews recently, Post your experience to the comments below:
Also provide answers if you wish. I will update the answers soon and keep on adding ABAP interview questions.

And finally , If you have found this post helpful , please consider giving a :

> +35 Recommend this on Google

If you think this can help others too, consider giving a:

> Share   +35 Share this on Google+

It's now time for Sayonara !!

Posted 6th July 2012 by Amby

Labels: ABAP