

ABAP Interview Questions & Answers

Set 1

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1. **What is an ABAP data dictionary?** - ABAP 4 data dictionary describes the logical structures of the objects used in application development and shows how they are mapped to the underlying relational database in tables/views.
2. **What are domains and data element?** - Domains: Domain is the central object for describing the technical characteristics of an attribute of an business objects. It describes the value range of the field. Data Element: It is used to describe the semantic definition of the table fields like description the field. Data element describes how a field can be displayed to end-user.
3. **What is foreign key relationship?** - A relationship which can be defined between tables and must be explicitly defined at field level. Foreign keys are used to ensure the consistency of data. Data entered should be checked against existing data to ensure that there are now contradictions. While defining foreign key relationship cardinality has to be specified. Cardinality mentions how many dependent records or how referenced records are possible.
4. **Describe data classes.**- Master data: It is the data which is seldom changed. Transaction data: It is the data which is often changed. Organization data: It is a customizing data which is entered in the system when the system is configured and is then rarely changed. System data: It is the data which R/3 system needs for itself.
5. **What are indexes?** - Indexes are described as a copy of a database table reduced to specific fields. This data exists in sorted form. This sorting form eases fast access to the field of the tables. In order that other fields are also read, a pointer to the associated record of the actual table is included in the index. The indexes are activated along with the table and are created automatically with it in the database.
6. **Difference between transparent tables and pooled tables.** - Transparent tables: Transparent tables in the dictionary have a one-to-one relation with the table in database. Its structure corresponds to single database field. Table in the database has the same name as in the dictionary. Transparent table holds application data. Pooled tables. Pooled tables in the dictionary have a many-to-one relation with the table in database. Table in the database has the different name as in the dictionary. Pooled table are stored in table pool at the database level.
7. **What is an ABAP/4 Query?** - ABAP/4 Query is a powerful tool to generate simple reports without any coding. ABAP/4 Query can generate the following 3 simple reports: Basic List: It is the simple reports. Statistics: Reports with statistical functions like Average, Percentages. Ranked Lists: For analytical reports. - For creating a ABAP/4 Query, programmer has to create user group and a functional group. Functional group can be created using with or without logical database table. Finally, assign user group to functional group. Finally, create a query on the functional group generated.
8. **What is BDC programming?** - Transferring of large/external/legacy data into SAP system using Batch Input programming. Batch input is a automatic procedure referred to as BDC(Batch Data Communications).The central component of the transfer is a queue file which receives the data via a batch input programs and groups associated data into "sessions".
9. **What are the functional modules used in sequence in BDC?** - These are the 3 functional modules which are used in a sequence to perform a data transfer successfully using BDC programming: BDC_OPEN_GROUP - Parameters like Name of the client, sessions and user name are specified in this functional modules. BDC_INSERT - It is used to insert the data for one transaction into a session. BDC_CLOSE_GROUP - This is used to close the batch input session.
10. **What are internal tables?** - Internal tables are a standard data type object which exists only during the runtime of the program. They are used to perform table calculations on subsets of database tables and for re-organizing the contents of database tables according to users need.
11. **What is ITS? What are the merits of ITS?** - ITS is a Internet Transaction Server. ITS forms an interface between HTTP server and R/3 system, which converts screen provided data by the R/3 system into HTML documents and vice-versa. Merits of ITS: A complete web transaction can be developed and tested in R/3 system. All transaction components, including those used by the ITS outside the R/3 system at runtime, can be stored in the R/3 system. The advantage of automatic language processing in the R/3 system can be utilized to language-dependent HTML documents at runtime.
12. **What is DynPro?** - DynPro is a Dynamic Programming which is a combination of screen and the associated flow logic Screen is also called as DynPro.
13. **What are screen painter and menu painter?** - Screen painter: Screen painter is a tool to design and maintain screen and its elements. It allows user to create GUI screens for the transactions. Attributes, layout, filed attributes and flow logic are the elements of Screen painter. Menu painter: Menu painter is a tool to design the interface components. Status, menu bars, menu lists, F-key settings, functions and titles are the components of Menu painters. Screen painter and menu painter both are the graphical interface of an ABAP/4 application.
14. **What are the components of SAP scripts?** - SAP scripts is a word processing tool of SAP which has the following components: Standard text. It is like a standard normal document. Layout sets. - Layout set consists of the following components: Windows and pages, Paragraph formats, Character formats. Creating forms in the R/3 system. Every layout set consists of Header, paragraph, and character string. ABAP/4 program.
15. **What is ALV programming in ABAP? When is this grid used in ABAP?** - ALV is Application List viewer. Sap provides a set of ALV (ABAP LIST VIEWER) function modules which can be put into use to embellish the output of a report. This set of ALV functions is used to enhance the readability and functionality of any report output. Cases arise in sap when the output of a report contains columns extending more than 255 characters in length. In such cases, this set of ALV functions can help choose selected columns and arrange the different columns from a report output and also save different variants for report display. This is a very efficient tool for dynamically sorting and arranging the columns from a report output. The report output can contain up to 90 columns in the display with the wide array of display options.
16. **What are the events in ABAP/4 language?**- Initialization, At selection-screen, Start-of-selection, end-of-selection, top-of-page, end-of-page, At line-selection, At user-command, At PF, Get, At New, At LAST, AT END, AT FIRST.
17. **What is CTS and what do you know about it?**- The Change and Transport System (CTS) is a tool that helps you to organize development projects in the ABAP Workbench and in Customizing, and then transport the changes between the SAP Systems and clients in your system landscape. This documentation provides you with an overview of how to manage changes with the CTS and essential information on setting up your system and client landscape and deciding on a transport strategy. Read and follow this documentation when planning your development project.
18. **What are logical databases? What are the advantages/ dis-advantages of logical databases?** - To read data from a database tables we use logical database. A logical database provides read-only access to a group of related tables to an ABAP/4 program. Advantages: i) check functions which check that user input is complete, correct, and plausible. ii) Meaningful data selection. iii) Central authorization checks for database accesses. iv)good read access performance while retaining the hierarchical data view determined by the application logic. dis advantages: i)If you do not specify a logical database in the program attributes, the GET events never occur. ii)There is no ENDGET command, so the code block associated with an event ends with the next event statement (such as another GET or an END-OF-SELECTION).
19. **What is a batch input session?**- BATCH INPUT SESSION is an intermediate step between internal table and database table. Data along with the action is stored in session ie data for screen fields, to which screen it is passed, program name behind it, and how next screen is processed.
20. **How to upload data using CATT?** - These are the steps to be followed to upload data through CATT: Creation of the CATT test case & recording the sample data input. Download of the source file template. Modification of the source file. Upload of the data from the source file.
21. **What is Smart Forms?** - Smart Forms allows you to create forms using a graphical design tool with robust functionality, color, and more. Additionally, all new forms developed at SAP will be created with the new Smart Form solution.
22. **How can I make a differentiation between dependent and independent data?** - Client dependent or independent transfer requirements include client specific or cross client objects in the change requests. Workbench objects like SAPScript are client specific; some entries in customizing are client independent. If you display the object list for one change request, and then for each object the object attributes, you will find the flag client specific. If one object in the task list has this flag on, then that transport will be client dependent.

23. **What is the difference between macro and subroutine?** - Macros can only be used in the program they are defined in and only after the definition are expanded at compilation / generation. Subroutines (FORM) can be called from both the program they are defined in and other programs. A MACRO is more or less an abbreviation for some lines of code that are used more than once or twice. A FORM is a local subroutine (which can be called external). A FUNCTION is (more or less) a subroutine that is called external. Since debugging a MACRO is not really possible, prevent the use of them (I've never used them, but seen them in action). If the subroutine is used only local (called internal) use a FORM. If the subroutine is called external (used by more than one program) use a FUNCTION.