

Interview Questions

Question 1) What is the use of NameBox in MS-Excel?

Answer: Name Box is used to return to a particular area of the worksheet by typing the range name or cell address in the name box.

Question2: Which formula in Excel returns the position of value in a specific Range.

Answer: Match Formula

Question 3: How would you provide a Dynamic range in "Data Source" of Pivot Tables?

Answer: To provide a dynamic range in "Data Source" of Pivot tables, first, create a named range using offset function and base the pivot table using a named range created in the first step.

Question 4: Explain the difference between SUBSTITUTE and REPLACE function in MS-Excel?

Answer: The SUBSTITUTE function substitutes one or more instances of old text with the new text in a string.

The REPLACE function swaps part of the text string with another set of text.

Question 5: To move to the previous worksheet and next sheet, what keys will you press?

Answer: To move to the previous worksheet, you will use the keys Ctrl + PgUp, and to move to the next sheet you will use keys Ctrl + PgDown.

Question 6: Which function is used to determine the day of the week for a date?

Answer:

WEEKDAY () returns the day of the week for a particular date counting from Sunday.

Example: Let date at A1 be 12/30/2016

WEEKDAY(A1,1) =>6

Question 7: What is a Dashboard and what are the important things we should keep in mind while creating a dashboard?

Answer: Dashboard is a technique used to present important information through graphical representation. It is helpful in presenting huge data in a single computer screen so it can be monitored with a glance.

There are few things which should be taken care of, while preparing the dashboards:

1. Minimum distraction
2. Simple, easy to communicate
3. Important data
4. Few Colors
5. Relevant graphs
6. Dashboard should be on single computer screen

Question 8: What is the difference between absolute and relative cell references?

Answer: When you fix cell referencing by applying dollar sign is absolute referencing and referencing without dollar sign is relative referencing.

For Example: =\$A\$1 is absolute referencing

And =A1 is relative referencing

Question 9: What is Pivot table and why we use it?

Answer: Pivot table allows quick summarizing of large data. We can calculate the field and arrange the data in presentable way in just few minutes. Most of the Excel experts believe that Pivot table is the most powerful tool.

Why do we use it?

- Pivot table gives us flexibility and analytical power
- It is a time saver source in Excel
- Listing unique values in any column of a table
- Making a dynamic pivot chart
- Linking data sources outside excel and be able to make pivot reports out of such data

Question 10: How can we determine the day of the week for a particular date?

Answer: By using Weekday function.

Question 11: If you add either new rows or new columns to the pivot table source data, the pivot table is not updated even when you click on 'Refresh Data'. Why and what is the solution?

Answer: This happens because the newly added data is outside the range of Pivot table's underlying data. To cure this either provide dynamic range to the Pivot Table or manually update the pivot table's source data.

Question 12: Is it possible to display the text in the data area of Pivot Table?

Answer: No, it's not possible as we could only show text either in 'Row Labels' or 'Column Labels'. However, if needed, we can show count of text records.

Question 13: How can you hide the error values in data field of Pivot Table?

Answer: This can be done from Pivot Table Options. Go to "Table Options" --> "Layout & Format" --> Enable "For error values show:" and provide the value to be shown for error values. Leave it empty for Null values.

Question 14: Which 3 report formats for Pivot Tables are available in Excel 2007 or later?

Answer: Compact, Report and Tabular.

Question 15: Using which option we can select the visible rows/columns in excel.

Answer: Using Go To Special dialog box we can select visible rows/columns in excel.

To select press F5 > Click Special button > select visible cells radio button > hit ok.

VBA Interview Questions

Q1. What is VBA?

Answer:

- VBA stands for Visual Basic for Applications.
- VBA is Programming language available in MS Office Tools.

Q2. What are Data-types?

Answer:

Data types helps to declare Variables with specific data, this helps to VBA to know the type of the data and assign the memory based on the DataType of the Variable.

Q3. Name some data types?

- Boolean
- Byte
- Currency
- Date
- Double
- Integer
- Long

- LongLong
- LongPtr
- Object
- Single
- String
- Variant

Q4. What is Variant Data Type and Explain it?

Answer:

Variant data type is default data type and it can hold any type of data. This will allocate maximum memory to hold the Variant Type. We use Variant data-type when we don't know the type of the data or to accept the multiple data types in a single variable.

Q5. What are Scope of Variables?

Answer:

We can define variable in different levels:

Local Level: Variables which are defined with DIM statement in a procedure or functions

Module Level: Which are defined with DIM statement on top of a module, can be accessed in entire module

Global Level: Which are defined Public statement at top of any module, can be accessed in entire project.

Q6. What is Option Explicit

Answer:

Option Explicit force the variables to be declared before using the variable. This is one of the best practices for VBA developers to avoid the type errors and build the error free applications.

Q7. What are different Types of core Modules available in VBE?

Answer:

Code Module: Default Modules which we use to write all procedures and functions

UserForms: UserForms helps to develop GUI (Graphical User Interface) applications.

Class Modules: Class module allows to create new objects and define methods, properties and events. Also, it will allow to enhance the existing objects.

Q8. What is the difference between Procedure and Functions?

Answer:

Procedures or Subroutines will not return a value; functions will return values.

Q9. Explain how can you pass arguments to VBA functions?

Answer:

Arguments can be passed in two ways in VBA Subroutines and Functions:

ByVal: When an argument is passed By Value, the value assigned to the argument is passed to the procedure. And any changes that are made to the argument inside a procedure, it will be lost when the procedure is ends.

ByRef: When an argument is passed By Ref, the actual address assigned to the argument is passed to the procedure. And any changes that are made to the argument inside the procedure will be passed when the procedure ends.

And By Ref is default in VBA.

Q10. What are the built-in Class modules?

Answer:

Workbook, Worksheet modules are Class modules.

Q11. What is the basic object model of Excel?

Please find the below basic Object model of Excel.

Application → Workbooks → Worksheets → Range / Chart

Q12. Why we need to use macros?

A macro is nothing but set of instructions which are stored in Visual Basic module in a VBA Editor. It helps in automating common repetitive tasks on daily, weekly or monthly basis by running macro. Using macros, you can save lot of time, increase productivity and on time delivery to customers.

Q13. What is the shortcut to go to VBA editor screen?

You can use the 'Alt+F11' key to go to VBA editor screen

Q14. How do I stop recording macro?

Please find the following steps to stop recording macro in the workbook.

Step 1: Go To Developer tab from the main ribbon of Excel window.

Step 2: Click on 'Stop Recording' command button to stop from the recording macro.

Q15. How do I delete macros from the workbook?

Please find the following steps to delete macros from the workbook.

Step 1: Go To Developer tab from the main ribbon of Excel window.

Step 2: Click on the Macros command button to see the available macros in the active workbook.

Step 3: Once you click on the Macros command button, Macro dialog box will appear on the screen.

Step 4: Select macro name which you want to delete macro and then click on 'Delete' command button.

Step 5: Now, It will show the confirmation dialog box. Click on Ok to delete the macro.

Q16. How to run macros automatically while opening Workbook in Excel VBA?

We can use Workbook_Open() Event to run macros automatically in Excel VBA while opening Workbook.

To get Workbook_Open() Event in Excel, please find the following steps.

1. Go To VBA Editor.
2. Click on 'ThisWorkbook' from the Project Explorer.
3. Now, you can see two drop down lists in the right side.
4. Select 'Workbook' from the first drop down list and then choose 'Open' from the second drop down list.

Q17. How do I show UserForm each time when I open workbook?

You can use Workbook_Open() Event to show UserForm automatically in Excel VBA when we open Workbook.

To get Workbook_Open() Event in Excel, please find the following steps.

1. Go To VBA Editor.
2. Click on 'ThisWorkbook' from the Project Explorer.
3. Now, you can see two drop down lists in the right side of the VBA Editor window.
4. Select 'Workbook' from the first drop down list and then choose 'Open' from the second drop down list.

Q18. What are the available looping statements?

Please find the different looping statements which are available in Excel VBA.

For.... Next loop, Do While.... Loop, Do until Loop, Do....Loop Until..,Do While Not...Loop, While.... Wend loop

Q19. How to add a UserForm or module or class to a VBA Project?

Please find the following steps to add UserForm or Module or Class Module to the VBA Project.

Add UserForm:

Step 1: Go To Insert menu in the VBA Editor window.

Step 2: Click on 'UserForm' to add to the Project. Now you can see added UserForm in the Project Explorer. Default UserForm name will be 'UserForm1'. You can change the UserForm name with using properties

Add Module:

Step 1: Go To Insert menu in the VBA Editor window.

Step 2: Click on 'Module' to add to the Project. Now you can see added Module in the Project Explorer. Default module name will be 'Module1'. You can change the module name with using properties.

Add Class Module:

Step 1: Go To Insert menu in the VBA Editor window.

Step 2: Click on 'Class Module' to add to the Project. Now you can see added Class Module in the Project Explorer. Default Class module name will be 'Class1'. You can change the class module name with using properties.

Q20. How to create object Variable for workbook, worksheet, etc.?

We can create object variable and it can use in entire procedure. Please find the following examples to create object for workbook, worksheet, etc.

Create object for Workbook:

```
Sub Create_Object_Workbook()
```

```
Dim Wb As Workbook
```

```
Set Wb = ActiveWorkbook
```

```
MsgBox Wb.Sheets(1).Name
```

```
End Sub
```

Explanation: In the above example, I have created and assigned to Active Workbook to 'Wb' object. And then I have used it in the next statement (MsgBox Wb.Sheets(1).Name) to display first worksheet name.

Q21. What is an array?

An array is a set of variables that are similar type. Using an array, you can refer to a specific value of an array by using array name and the index number (also called subscript).

We can create and define size of an array variable in the following way.

```
Dim ArrayName (IndexNumber) As Datatype
```

Example: Dim aValue(2) As Integer

In the above statement 'aValue' is an array name and '2' indicates an array size.

Q22. How to assign values to an array?

We can assign values to an array in the following way.

'Declare an array variable

Dim aValue (2) As Integer

aValue(0)="first"

aValue(1)= "Second"

aValue(2)= "Third"

'Or

Dim aValue () As Integer={" first ","Second","Third"}

Q23. What is meant by Data Type?

Data Type: A data type tells, what kind of variable we are going to use in a procedure or function. The information that specifies how much space a variable needs called a data type.

Before using variable, we need to know how much space the variable will occupy in memory, because different variables occupy different amount of space in memory.

We can declare the variable in the following way.

Dim VariableName as Datatype

Example:

Dim iCnt as Integer

Where iCnt represents VariableName and Integer represents Datatype.

Q24. What are the various data types available in the VBA?

The following are different data types which are available in Excel VBA.

Byte, Boolean, Integer, Long, Single, Double, Currency, Decimal, Date, Object, String, Variant and User defined data types.

Q25. What are the different UserForm Controls and ActiveX Controls?

UserForm Controls:

Button, Combo Box, Check Box, Spin Button, List Box, Option Button, Group Box, Label, Scroll Bar, etc.,.

ActiveX Controls:

Command Button, Combo Box, Check Box, List Box, Text Box, Scroll Bar, Spin Button, Option Button, Label, Image, Toggle Button.

Q26. How to assign macros to a button?

Please find the following steps to assign macro to a button.

Step 1: Go to the Developer tab from the excel ribbon menu, go to Forms Control group.

Step 2: Click on Button from the Form Controls.

Step 3: Click the worksheet location where you want the button to appear.

Step 4: Drag the button in the sheet.

Step 5: Right click on the button, click on Assign Macro.

Step 6: Assign Macro Dialog box will appear now, click the name of the macro that you want to assign to the button. Click on OK.

Step 7: You can format the control by specifying control properties.

Step 8: Click on button to test. Now, your macro should run.

Q27. What is meant by scope of variables?

Understanding the scope of variables is very important for VBA Developers, it is also one of the most frequently asked Excel VBA Interview Questions and Answers.

When we are working with variables, it is important to understand the Scope of a Variable. The Scope describes the accessibility or life time or visibility of a variable.

There are four levels of Scope:

- Procedure-Level Scope
- Module-Level Scope
- Project-Level Scope
- Global-Level Scope

Q28. How to find last row in the worksheet?

We need to find Last used Row with data if we want to perform certain task on each row of worksheet. Please find the following statements to find last row in the worksheet.

Find last row in the worksheet:

Dim lastRow As Long

lastRow = ActiveSheet.Cells.SpecialCells(xlLastCell).Row

Q29. How to find last column in the worksheet?

We need to find Last used Column with data if we want to perform certain task on each column in the worksheet. Please find the following statements to find last column in the worksheet.

Find last column in the worksheet:

Dim lastColumn As Long

lastColumn = ActiveSheet.Cells.SpecialCells(xlLastCell).Column

Q30. How to fasten the VBA macro?

We have several best practices to follow while coding VBA. This is also one of the most frequently asked Excel VBA Interview Questions and Answers. This helps interviewer to understand your real time experience in VBA.

We can fasten the execution of macros or VBA Procedures by following the below tips.

1. Declare the variables and avoid using 'Variant' Data Type.
2. Turn Off Screen Updating
3. Turn Off Automatic Calculations
4. Disable Events
5. Use With Statement
6. Use vbNullString instead of "".
7. Release memory objects at the end of the procedure.

Q31. How to enable/disable screen updating? Or how do I hide the process of running macro?

Enabling and Disabling the Screen updating will be used in almost all projects. Questions on understanding the screen updating are also one of the most frequently asked Excel VBA Interview Questions and Answers.

Here is the approach to enable or disable screen updating or screen flickering.

In order to stop the screen flickering, stop the screen updating at Staring of the procedure:

Application.ScreenUpdating = False

You have to set back screen updating as True Before ending of the procedure:

Application.ScreenUpdating = True

Q32. How do I stop triggers or display alerts or error warnings while running macros?

Here is the approach to stop trigger or display alerts or error warnings.

In order to stop triggers, disable the display alerts at Starting of the procedure:

```
Application.DisplayAlerts = False
```

You have to set enable display alerts before ending of the procedure:

```
Application.DisplayAlerts = True
```

Q33. What are the different types of error handling techniques?

Please find the below different types of error handling techniques.

1. On Error Resume Next
2. On Error Goto Err_Lbl
3. On Error Goto 0

Q34. How to check whether file exists or not in a specified location?

You can find a specific file exist or not in the following two ways.

1. Using FileSystemObject:

Here is the example to check file exist or not using 'FileSystemObject'.

```
Sub Check_File2()  
Dim FSO  
Dim sFileName As String  
sFileName = "C:/Test/Workbook.xls"  
Set FSO = CreateObject("Scripting.FileSystemObject")  
If Not FSO.FileExists(sFileName) Then  
MsgBox "File Does Not Exists."  
Else  
MsgBox "File Exists."  
End If  
End Sub
```

2. Using Dir Function:

Here is the example to check file exist or not using 'Dir' function.

```
Sub Check_File1()  
Dim sFileName As String  
sFileName = "C:/Test/Workbook.xls"  
If Dir(sFileName) <> "" Then  
MsgBox "File Exists."  
Else  
MsgBox "File Does Not Exists."  
End If  
End Sub
```

Q35. How to save workbook using Excel VBA?

You can save the workbook using following example. In the below example we are adding new workbook and then assigned it to object named Wkb. Finally we are saving workbook with using Save method of workbook object.

```
Sub Save_Workbook()  
Dim Wkb As Workbook  
Set Wkb = Workbooks.Add  
Wkb.Save  
End Sub
```

Q36. How to change the existing file name?

You can change the existing file name of workbook using the following example. In the below example we are adding new workbook and then assigned it to object named Wkb. Finally we are changing workbook name with using SaveAs method of workbook object.

```
Sub SaveAs_Workbook()  
Dim Wkb As Workbook  
Set Wkb = Workbooks.Add  
ActiveWorkbook.SaveAs Filename:="C:\Test.xlsm"  
End Sub
```

Q37. How to delete a file in a specified location?

Please find the following statements to delete a file from the specified location.

```
Sub sbDelete_File()  
Dim FSO  
Dim sFile As String  
sFile = "C:\Test.xlsm"  
'Set Object  
Set FSO = CreateObject("Scripting.FileSystemObject")  
'Check File Exists or Not  
If FSO.FileExists(sFile) Then  
FSO.DeleteFile sFile, True  
MsgBox "Deleted The File Successfully", vbInformation, "Done!"  
Else  
MsgBox "Specified File Not Found", vbInformation, "Not Found!"  
End If  
End Sub
```

Note: Before deleting file from the specified location, we have to check whether file is exists or not in the specified location. In the above example we are using statement: ' FSO.FileExists(sFile)' to check for the file.

Q38. How to copy a file from one location to another location?

You can copy a file from one location to another location in the following way.

```
Sub Copy_File()  
Dim FSO  
Dim sFileName As String  
Dim dFileName As String  
sFileName = "D:\Test.xlsx" 'Source File Location Name  
dFileName = "E:\Test.xlsx" 'Destination File Location Name  
Set FSO = CreateObject("Scripting.FileSystemObject")  
FSO.CopyFile sFileName, sFileName, True  
End Sub
```

Q39. How to move a file from one location to another location?

You can move a file from one location to another location in the following way.

```
Sub Move_File()  
  
Dim sFileName As String  
  
Dim dFileName As String  
  
sFileName = "D:\Test.xlsx" 'Source File Location Name  
  
dFileName = "E:\Test.xlsx" 'Destination File Location Name  
  
Name sFileName As sFileName  
  
End Sub
```

Tableau

Q1. What is data visualization?

Data visualization refers to the techniques used to organize and present information intuitively (e.g. points, lines or bars). According to Tableau, using Tableau visualizations, you gain the ability to quickly answer questions; your data becomes a competitive advantage instead of an underutilized asset.

Q2. What is the difference between Quick Filter, Normal filter and Context filter?

In Tableau, filters are used to restrict the data from database. The differences between Quick and Normal/ Traditional filter are:

- Normal Filter is used to restrict the data from database based on selected dimension or measure. A Traditional Filter can be created by simply dragging a field onto the 'Filters' shelf.
- Quick filter is used to view the filtering options and filter each worksheet on a dashboard while changing the values dynamically (within the range defined) during the run time.
- Context Filter is used to filter the data that is transferred to each individual worksheet. When a worksheet queries the data source, it creates a temporary, flat table that is used to compute the chart. This temporary table includes all values that are not filtered out by either the Custom SQL or the Context Filter.

Q3. What is data blending? When do you use this?

According to Tableau, Data blending is the ability to bring data from multiple data sources into one Tableau view, without the need for any special coding.

You can use data blending in Tableau in the following cases:

- Filter on secondary dimension fields
- Use secondary dimensions in the view
- Link data between two data sources using fields that are not in the view

If you are combining data from the same data source, such as Excel worksheets or tables in an Oracle database, you use joining.

Q4. What are the differences between twb and twbx?

A twb is an xml document which contains all the selections and layout made you have made in your Tableau workbook. It does not contain any data.

A twbx is a 'zipped' archive containing a twb and any external files such as extracts and background images.

5. What is Aggregation & Disaggregation?

The process of viewing numeric values or measures at higher and more summarized levels of the data is called aggregation. When you place a measure on a shelf, Tableau automatically aggregates the data, usually by summing it. You can easily determine the aggregation applied to a field because the function always appears in front of the field's name when it is placed on a shelf. For example, Sales becomes SUM(Sales). You can aggregate measures using Tableau only for relational data sources. Multidimensional data sources contain aggregated data only. In Tableau, multidimensional data sources are supported only in Windows. (Source)

According to Tableau, Disaggregating your data allows you to view every row of the data source which can be useful when you are analyzing measures that you may want to use both independently and dependently in the view. For example, you may be analyzing the results from a product satisfaction survey with the Age of participants along one axis. You can aggregate the Age field to determine the average age of participants or disaggregate the data to determine at what age participants were most satisfied with the product.

Q6. What are the differences between groups and sets?

Groups simplify large numbers of dimension members by combining them into higher-level categories. Sets create a custom field based on existing dimensions that can be used to encode the view with multiple dimension members across varying dimension levels.

Q7. How do we do testing in Tableau?

You can do performance testing on Tableau with Tableau Server load-testing solution called TabJolt. You can use TabJolt to push a heavy workload onto Tableau Server to give it a jolt and study how the server bends or breaks under load.

Q8. What is Pages shelf?

You can analyze data on Tableau using a feature called Pages Shelf. It helps you analyze data based on the individual values contained within a field. For example by adding a date field you can show how your visualization changes over time.

Q9. How do you add custom color to Tableau?

Tableau offers three types of color palettes: categorical, sequential, and diverging. You can create your own custom color palette by modifying the Preferences.tps file that comes with Tableau Desktop. The Preferences.tps file is located in the My Tableau Repository. The preferences file is a basic XML file that you can open in a text editor to modify. In tableau 9.0 version there is a color picker option.

Q10. What is Assume referential integrity?

Referential integrity is a concept which ensures that relationships between databases/tables remain consistent, i.e. it ensures that the references to data are valid. You can improve query performance by selecting this option from the data menu. When you use this option, Tableau will include the joined table in the query only if it is specifically referenced by fields in the view.

Q11. Explain when would you use Joins vs. Blending in Tableau?

If data resides in a single source, it is always desirable to use Joins. When your data is not in one place blending is the most viable way to create a left join like the connection between your primary and secondary data sources.

Q12. What is default Data Blending Join?

Data blending is the ability to bring data from multiple data sources into one Tableau view, without the need for any special coding. A default blend is equivalent to a left outer join. However, by switching which data source is primary, or by filtering nulls, it is possible to emulate left, right and inner joins.

Q13. What do you understand by blended axis?

In Tableau, measures can share a single axis so that all the marks are shown in a single pane. Instead of adding rows and columns to the view, when you blend measures there is a single row or column and all of the values for each measure is shown along one continuous axis. We can blend multiple measures by simply dragging one measure or axis and dropping it onto an existing axis.

Q14. What is story in Tableau?

A story is a sheet that contains a sequence of worksheets or dashboards that work together to convey information. You can create stories to show how facts are connected, provide context, demonstrate how decisions relate to outcomes, or simply make a compelling case. Each individual sheet in a story is called a story point

Do you prefer watching a video tutorial to understand & prepare yourself for your Tableau interview? Here is our video on the top Tableau interview questions and answers. The video also tells you why Tableau is the most preferred Data Visualisation tool and how will a career in Tableau look like once you crack your Tableau interview!

Q15. What is the difference between discrete and continuous in Tableau?

There are two types of data roles in Tableau – discrete and continuous dimension.

Discrete data roles are values that are counted as distinct and separate and can only take individual values within a range. Examples: number of threads in a sheet, customer name or row ID or State. Discrete values are shown as blue pills on the shelves and blue icons in the data window.

Continuous data roles are used to measure continuous data and can take on any value within a finite or infinite interval. Examples: unit price, time and profit or order quantity. Continuous variables behave in a similar way in that they can take on any value. Continuous values are shown as green pills.

Q16. How do you automate reports using Tableau software?

This is how you can automate the reports: while publishing the report to Tableau server, you will find the option to schedule reports. Click on this to select the time when you want to refresh the data.

Q17. How can we combine database and flat file data in Tableau desktop?

You can combine them by connecting data two times, one for database tables and one for flat file. The Data->Edit Relationships. Give a join condition on common column from db tables to flat file

Q18. What type of join is used in data blending?

No join is used in data blending.

Q19. What are the platforms Tableau server can run on?

Tableau server can run on Windows and Mac.

Q20. Does Tableau integrate with Hadoop/HiveServer?

Tableau can only integrate with HiveServer, not Hadoop.

Q21. Where all can you use global filters?

Global filters can be used in sheets, dashboards and in stories.

Q22. How do you publish tableau reports to tableau server?

Tableau reports can be published to server using command utility.

Q23. How do you normalize data for use in Tableau?

When an Excel data source (other than a cube) is already formatted as a cross-tabulation or is otherwise aggregated, options for viewing, aggregating, and grouping in Tableau are limited. Tableau cannot see underlying data points that have already been summarized into a higher-level group or order. To take advantage of Tableau's full functionality, you need to normalize the data before connecting to it from Tableau.

You can normalize a table manually, but Tableau provides an Excel add-in that can be downloaded [here](#).

MS SQL Sever

Q1 What's the difference between a primary key and a unique key?

Both primary key and unique key enforces uniqueness of the column on which they are defined. But by default primary key creates a clustered index on the column, where unique creates a nonclustered index by default. Another major difference is that, primary key doesn't allow NULLs, but unique key allows one NULL only.

Q2 What is difference between DELETE and TRUNCATE commands?

Delete command removes the rows from a table based on the condition that we provide with a WHERE clause. Truncate will actually remove all the rows from a table and there will be no data in the table after we run the truncate command.

TRUNCATE:

TRUNCATE is faster and uses fewer system and transaction log resources than DELETE.

TRUNCATE removes the data by deallocating the data pages used to store the table's data, and only the page deallocations are recorded in the transaction log.

TRUNCATE removes all rows from a table, but the table structure, its columns, constraints, indexes and so on, remains. The counter used by an identity for new rows is reset to the seed for the column.

You cannot use TRUNCATE TABLE on a table referenced by a FOREIGN KEY constraint. Because TRUNCATE TABLE is not logged, it cannot activate a trigger.

TRUNCATE cannot be rolled back.

TRUNCATE is DDL Command.

TRUNCATE Resets identity of the table

DELETE:

DELETE removes rows one at a time and records an entry in the transaction log for each deleted row.

If you want to retain the identity counter, use DELETE instead. If you want to remove table definition and its data, use the DROP TABLE statement.

DELETE Can be used with or without a WHERE clause

DELETE Activates Triggers.

DELETE can be rolled back.

DELETE is DML Command.

DELETE does not reset identity of the table.

Note: DELETE and TRUNCATE both can be rolled back when surrounded by TRANSACTION if the current session is not closed. If TRUNCATE is written in Query Editor surrounded by TRANSACTION and if session is closed, it can not be rolled back but DELETE can be rolled back.

Q3 What is the difference between a HAVING CLAUSE and a WHERE CLAUSE?

They specify a search condition for a group or an aggregate. But the difference is that HAVING can be used only with the SELECT statement. HAVING is typically used in a GROUP BY clause. When GROUP BY is not used, HAVING behaves like a WHERE clause. Having Clause is basically used only with the GROUP BY function in a query whereas WHERE Clause is applied to each row before they are part of the GROUP BY function in a query.

Q4 What are the authentication modes in SQL Server? How can it be changed?

Windows mode and Mixed Mode - SQL and Windows. To change authentication mode in SQL Server click Start, Programs, Microsoft SQL Server and click SQL Enterprise Manager to run SQL Enterprise Manager from the Microsoft SQL Server program group. Select the server then from the Tools menu select SQL Server Configuration Properties, and choose the Security page.

Q5 What is the difference between a Local and a Global temporary table?

A local temporary table exists only for the duration of a connection or, if defined inside a compound statement, for the duration of the compound statement.

A global temporary table remains in the database permanently, but the rows exist only within a given connection. When connection is closed, the data in the global temporary table disappears. However, the table definition remains with the database for access when database is opened next time.

Q6 What is PRIMARY KEY?

A PRIMARY KEY constraint is a unique identifier for a row within a database table. Every table should have a primary key constraint to uniquely identify each row and only one primary key constraint can be created for each table. The primary key constraints are used to enforce entity integrity.

Q7 What is UNIQUE KEY constraint?

A UNIQUE constraint enforces the uniqueness of the values in a set of columns, so no duplicate values are entered. The unique key constraints are used to enforce entity integrity as the primary key constraints.

Q8 What is FOREIGN KEY?

A FOREIGN KEY constraint prevents any actions that would destroy links between tables with the corresponding data values. A foreign key in one table points to a primary key in another table. Foreign keys prevent actions that would leave rows with foreign key values when there are no primary keys with that value. The foreign key constraints are used to enforce referential integrity.

Q9 What is CHECK Constraint?

A CHECK constraint is used to limit the values that can be placed in a column. The check constraints are used to enforce domain integrity.

Q10 What is NOT NULL Constraint?

A NOT NULL constraint enforces that the column will not accept null values. The not null constraints are used to enforce domain integrity, as the check constraints.