**Q. 1. What is a listBox and ComboBox?( 6mrks )**

**Ans ListBox :**

ListBox present a list of choices that are displayed vertically in single column, if number of items exist the value can be displayed scrollbar automatically appear on control. ListBox have list property contain list or item to display. To add the item at design time, click on list property & add item, press ctrl + enter after adding each item. To add item at runtime to AddItem method is used. Syntax is as following :

object.AddItem item, index

The item argument string that represents text to add to the list . The index argument is an integer than indicated when in list to add the new item.

**ComboBox :**

A combobox control is combination of textbox and listbox. This control enables user to select either by typing in the text into combobox or by selecting items from the list.

The combobox controls has three different style that can be set .

a) Drop down combo (style 0)

b) Simple combo (style 1)

c) Drop down list (style 2)

**Q. 2. Name and describe the three styles of combobox.( 6 mrks )**

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b) Simple combo (style 1)

c) Drop down list (style 2)

a)**Drop down combo** :

It first appears as only an editable area with down arrow button to drop down list portion with this style. We can either type text into text portion which is an editable area or select a value from drop down list. The list portion status hidden until the user clicks down arrow button to drop down list portion.

b)**Simple combo**:

This style looks like listbox setting directory underneath a textbox. The listbox , which below textbox which is always visible showing an item present in it. Scrollbar

display decides the list if there are to many item to display in listbox area. So important thing is , list is always present below textbox. Hence there no downward arrow button which are used to open a list, in case of drop down combo.

c)**Drop down list Combo**:

The drop down list combobox terms combobox into drop down listbox at run time , the control looks like drop down combobox. The user click on down arrow view list. Main difference between drop down combo & drop down list combo are editable are in the drop down list disable i.e. means user can only select from item listed in portion of listbox of the combobox and he **TYBSC (IT) Visual Basic** 2

can‟t type and item in the next or edit area of the combobox.

**Q. 3. How can we make scroll bars appear on a listbox or combobox?**

**Ans** After adding items in list property of the combobox or listbox we may have to resize it . When the size of the listbox or combobox is small and it contains many list items then VB automatically shows scrollbar on listbox or combobx to scroll down from top-bottom.

**Q.4. Explain the purpose of ListCount and ListIndex Property?( 4 mrks )**

**Ans ListCount :**

The application uses the list count property of listbox to store the number of item in the list. ListCount is always one more than the highest list index, since list index begins with zero.

**Ex.** totalItem = lstItem.listCount

**ListIndex :**

When a project is running and the user selects an item from the list, the index number of that item is stored in the listIndex property of the listbox. The listindex of the first item in the list is zero. If no list item is selected , the list index property set to -1. We can use listIndex property to select an item in list or deselect all items in code.

**Ex.** lstCopyType.listIndex = 3

lstCopyType.listIndex = -1

„Deselect all items in list.

|  |  |
| --- | --- |
| **Q. 8. Explain differences between Do/Loop and For-Next Loop. Do/Loop** | **For-Next Loop** |
| Do-Loop construct is used when we don‟t know how many iterations will be performed. | When we know the exact number of execution on the block of code, For-Next construct is used. |
| Do-while tests the loop condition each time through the loop & it keeps executing while the test expression is a true value | To use this construct we have to use a counter. We will always loop from star value to some end value. |
| In this we will have to specify the increment number. | In For-Next loop always increment by one by default |
| General Syntax is :  Do while <condition>  <statements>  Loop | General Syntax is :  For intCounter = intStart to intend  [step to increment]  <statements>  Next [intCounter] |
| Ex. Dim intNum as integer  Do While intNum < 100  lblNumber.Caption=intNum  intNum = intNum + 1 | Ex.  For intCount = 1 to 5  Form1. Print intCount  Next |

**Q . 2. Explain the difference between ByVal and ByRef. When is each used? ( 6 mrks )**

**Ans.**

|  |  |
| --- | --- |
| When we pass a value to a procedure we may pass it ByVal or ByRef. **ByVal** | **ByRef** |
| The ByVal sends a copy of the argument’s value to the procedure. | The ByRef sends a reference indicating where the value is stored in memory, allowing called procedure to actually change the argument’s original value. |
| When we want to pass copy of argument we can use ByVal keyword**.** | When we want to pass the reference to the calling procedure we can use ByRef keyword. The ByRef is Default. |
| Syntax is :  Private Sub Procedure\_name(ByVal var as Integer) | Syntax is :  Private Sub Procedure\_name(ByRef var as Integer) |
| For ex.  Private Sub SelectColor(ByVal lngIncomingColor as Long)  ‘ Do Something  End Sub | For ex.  Private Sub SelectColor(ByRef lngIncomingColor as Integer)  ‘ Do Something  End Sub |

**Q. 1. What are the purpose of a Declare Statement?**

**Ans.**

Declaring variables means naming the variable and specifying their data types, that is declaration statements establish our project’s variables and constants give them names, and specify the data type they will hold.

These declaration statements are not considered as executable ; that is, they are not executed in flow of instructions during program execution.

Although these are several ways of declaring the variables, the most commonly used way is the Dim statements with the data type. We can omit the data type, then default data type becomes variant.

**Here are some sample examples for declaration statement :**

Dim strName as String ‘Declared the String variable

Dim intCount as Integer ‘Declared an Integer variable

Dim curDiscount as Currency ‘Declared a currency variable.

**Q1. Assume you have database containing the names and phone numbers of your friends. Describe how the terms file, table, row, column, record, field and key apply to database.**

**Ans:**

1. For maintaining the names and phone numbers we required a *Database File*. This can be Sql, Fox Pro, Microsoft Access file (extension .mdb). Example “phonenumbers.mdb”.

2. This database file contains multiple *Tables* which stores Names and Phone numbers. Each table can be viewed as spreadsheet with rows and columns.

3. Each Row in a table represents one single item or a record.

4. Each *Column* is used to store element of data. Like in this example columns can be Names, Phone Numbers.

5. The element which represents columns are called as *Fileds.*

6. Most of the table use a *Key Field* to identify each record. The key field is often a id or name etc. in this case name key field can be Names field.

**Q2. Explain deference between a data control and data-bound control.( 6 mrks )**

|  |  |
| --- | --- |
| **Ans:** Data control | Data-bound |
| Using data control is a two-step process. First you place a data control on a form and set the properties to link it to a database file and table | You create the controls, such as labels and text boxes, to display the actual data. Each control is a bound to particular field in the table. In this example the label is called a data bound control and automatically displays the contents of bound field when the project runs. |
| Data control generally links one form with one table. | If you want to have data-bound controls on second form, you must place a data control on that form. |
| Prefix of data control is “dat” | For data-bound control prefix depends upon the control which you are using. |
| Data control to work you need to set some properties to connect with database like connect property, database name property, record source property. | To display data on the data-bound control that you are using like labels or textboxes. You need set it‟s data source property and data field name which is column name form the table. |

**Q6. What is SQL, and how is it used in Visual Basic? ( 6 mrks )**

**Ans:**

Visual Basic uses Structured Query Language (SQL) to create new dynasets. SQL is an Industrial Standard language for processing relational database.

Visual Basic uses SQL to create new recordsets.Set the data controls RecordSource property to an SQL query and execute a Refresh method

Visual Basic use SQL to select fields and records from a table and join the fields from row tables.

**Syntax:**

Select [ distinct ] FieldList From TableNames

Where SearchConditions

Group By FieldList

Having GroupCriteria

Order By FieldList

**Example:**

Select \* From Books

Select \* From Books, Subjects

Where Books.Subject\_Code = Subjects.SubjectCode

Order By Title

Select Distinct Author from Books

**Q.7. What is grid control ? How will you create it ?( 8 mrks )**

**Ans.**

The Databound grid control in VB 6.0 adds power and flexibility to your DataBase programs. you can easily provide grid access to any available DataBase.You can provide simple display only access for used with summary data and on-screen reports.You can also provide editing capability to your dara grid including modifying only, add rights or delete rights.

It's very easy to create a data grid form

A Grid Control-Step-by-Step

**STEP 1:** Begin a new project and widen the form.You may want to close the Project Explorer an Form Layout windows and float the properties

window to allow room to work on the wide form.

**STEP 2:**Add a data control along the bottom of the form.Set the control's Name property to datBooks and its DatabaseName property to RnrBooks.mdb.Set the **TYBSC (IT) Visual Basic** 3

RescordSource property to Books and verify that the RecordsetType is 1 - Dynaset.

**STEP 3:**Select project/Components to display the Components dialog box.Then locate Microsoft Data Bound Grid Control 5.0, select it , and close the dialog box.You should see the new tool in the toolbox.

**STEP 4:**Click on the DBGrid tool and draw a large grid on the form.Then , using the properties window , change the control's Name property to dgbBooks and its DataSource property to datBooks.

**STEP 5**:Create the menu bar. It should have a File menu with only an Exit command.

**STEP 6:**Create the large label at the top of the form with the form's title: Book List.Change the font and size to something like.

**Q.9 Write Short notes on Seek method.( 6 mrks )**

**Ans.**

The fastest way to search for a particular record is to use the Seek method , which can be used only with a table recordset tab.The Seek method uses indexes for the search , which is much faster than checking every record in the table as you do in a find .

In order to do a seek , the field on which you search must be defined with an index.

Syntax:

Data1.Recordset.Seek ComparisonOperator , FieldValue

The comparison operator must be enclosed in quotation marks and can be any one of this "=",">=",">","<=","<".The field value is the actual value for which to search string literal must be enclosed in quotation marks;numeric values must not be so enclosed.

Example:

1. Data1.Recordset.Seek "=", "0-671-66398-4"
2. Data1.Recordset.Seek ">=", 1 'find first record greater than or equal to 1 in the first position of the key
3. **Q1. Name and give the purpose of five types of data available in Visual Basic. ( 8 mrks )**
4. **Ans:**
5. The data type of variable and constant indicates what type of information will be the stored in the allocated memory space: perhaps a name, a dollar amount, a date or a total. If none of the data type is specified the default data type is variant. Following are some data types and there use:
6. **Integer:**
7. Integer data type can store any whole numbers with in the range -32,768 to 32,767.
8. **String:**
9. String is also the most commonly used data type which can store Alphabetical data like letters, digits, other characters.
10. **Variant:**
11. Variant data type is default data type which can store the any kind of data like Integer, String, Object etc.
12. **Currency:**
13. Currency stores Decimal fractions, such as dollars and cents.
14. **Date:**
15. The date is also a data type which stores eight-character date.
16. **Double:**
17. Double-precision floating-point numbers with 14 digits of accuracy.
18. **Long:**
19. Larger whole number.

**Q3. What effect does the location of a Dim statement has on the variables is declares?**

**Ans:**

1. There are several ways of declaring the variable, the most commonly used statement is Dim statement to declare the variable. The syntax for declaring the variable using Dim is as follows:

Dim Identifier [As Data type]

2. The reserved word Dim is really short for *dimension,* which means ‘Size’. When you declare a variable, the amount of memory reserved depends on its data type.

3. In the Dim statement [as data type] is optional. If you omit that statement the default data type is applied to the variable.

4. **Example for using Dim statement:**

Dim strName as String ‘Declared the String variable

Dim intCounter as Integer ‘Declared an Integer variable

Dim curDiscount as Currency ‘Declared a currency variable

Dim vntChanging ‘Default variant data type