COLLEGE OF ENGINEERING & TECHNOLOGY

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Course   : Introduction To Programming

Course No.   : CC114

Sheet 10
One Dimensionl Arrays & ComboBoxes

Q1. Choose the correct answer:

1. Arrays can be declared to hold values of ………….
   a) type Double   b) type Integer   c) type String   d) any data type

2. An array's elements are related by the fact that they have the same array name and ………
   a) constant value   b) index   c) type   d) value

3. Method ……….. returns an array's highest index
   a) GetUpperBound   b) GetUpperLimit   c) GetHighestIndex   d) Length

4. The first element in every array is the …………
   a) index   b) zeroth element   c) length of the array   d) smallest value in the array

5. Arrays …………...
   a) are controls   b) always have one dimension
   c) keep data in sorted order at all times   d) are objects

6. The array initializer list can …………
   a) be used to determine the size of the array
   b) contain a comma-separated list of initial values for the array elements
   c) be empty   d) All of the above

7. Which method call sorts array words in ascending order?
   a) Array.Sort(words)   b) words.SortArray()   c) Array.Sort(words, 1)   d) Sort(words)

8. The ComboBox control combines a TextBox control with a …….. control
   a) DateTimePicker   b) ListBox   c) NumericUpDown   d) Label

9. The property …… of the ComboBox control specifies how many items can be displayed in the drop-down list.
   a) ItemsMax   b) ScrollLimit   c) MaxDropDownItems   d) MaxDropDownItems

10. Property …….. contains the size of an array.
    a) Elements   b) ArraySize   c) Length   d) Size

Q2. **The following code declares numbers array. What's the result of this code ?**

```
Dim length As Integer = numbers.Length - 1
Dim tempArray As Integer() = New Integer(0 To length) {}

For i As Integer = length To 0 Step -1
    tempArray(length - i) = numbers(i)
Next
```

Q3. **The code that follows uses a For...Next loop to sum the elements in an array. Find the error(s).**
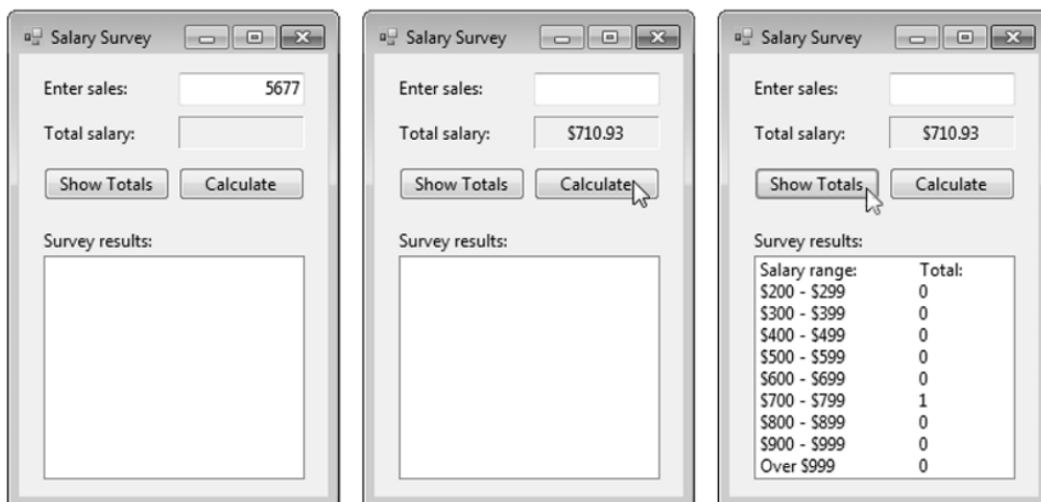
```
Dim sum As Integer
Dim numbers As Integer() = {1, 2, 3, 4, 5, 6, 7, 8}

For counter As Integer = 0 To numbers.Length
    sum += numbers(counter)
Next
```

Q4. **Use a one-dimensional array to solve the following problem: A company pays its salespeople on a commission basis. The salespeople receive $200 per week, plus 9% of their gross sales for that week. For example, a salesperson who grosses $5,000 in sales in a week receives $200 plus 9% of $5,000, a total of $650. Write an app (using an array of counters) that determines how many of the salespeople earned compensation in each of the following ranges (assuming that each salesperson's salary is truncated to an integer amount): $200-299, $300-399, $400-499, $500-599, $600-699, $700-799, $800-899, $900-999 and over $999. Allow the user to enter the sales for each employee in a TextBox. The user clicks the Calculate Button to calculate the salesperson's salary. When the user is done entering this information, clicking the Show Totals Button displays how many of the salespeople earned salaries in each of the above ranges**

Q5. **Twenty students were asked to rate, on a scale from 1 to 10, the quality of the foodin the student cafeteria, with1being "awful" and 10 being "excellent." Allow the user input to be entered using a ComboBox. Use an Integer array to store the fre quency of each rating. Display the frequencies as a histogram in a multiline, scrollable TextBox**

Cafeteria Survey		
Rate cafeteria food:	1	▼

Submit Rating

Survey results:

Cafeteria Survey		
Rate cafeteria food:	5	▼

Submit Rating

Survey results:

Rating	Frequency
1	
2	
3	
4	
5	*
6	
7	

Cafeteria Survey		
Rate cafeteria food:	7	▼

Submit Rating

Survey results:

Rating	Frequency
1	*
2	*
3	
4	****
5	****
6	***
7	***