**Programming / Database Question 1**

**Explain the following method.**

 private string dec2bin(Int32 decint)

 {

 string result="";

 Int32 i;

 for (i = 65536; i > 0; i = i / 2)

 {

 if (decint >= i)

 {

 result += "1";

 decint = decint - i;

 }

 else

 result += "0";

 }

 return result;

 }

**Programming / Database Question 2**

**Explain following method.**

 private string dec2hex(Int32 decint)

 {

 string result = "",result2="";

 Int32 temp1, i, x=1;

 for (i = 15;( i< 65537); i = i\*16)

 {

 temp1 = decint & i;

 if (temp1 < 10\*x)

 result +=(temp1/x).ToString();

 if (temp1 == 10 \* x)

 result += "A";

 if (temp1 == 11 \* x)

 result += "B";

 if (temp1 == 12 \* x)

 result += "C";

 if (temp1 == 13 \* x)

 result += "D";

 if (temp1 == 14 \* x)

 result += "E";

 if (temp1 == 15 \* x)

 result += "F";

 x = x \* 16;

 }

 for (i = result.Length; i > 0; i--)

 result2 += result[i - 1];

 return result2;

 }

**Programming / Database Question 3**

**Explain following method.**

 private string bin2dec(string instr)

 {

 string result = "";

 Int32 decint=0;

 Int32 i,x=1;

 for (i = instr.Length; i>0 ; i--)

 {

 if(instr[i-1]=='1')

 decint=decint+x;

 x=x\*2;

 }

 result = decint.ToString();

 return result;

 }

**Programming / Database Question 4**

**Explain the following method.**

 private string hex2dec(string instr)

 {

 string result ="";

 Int32 decint=0;

 Int32 i,x=1;

 instr = instr.ToUpper();

 for (i = instr.Length; i > 0;i--)

 {

 if(Convert.ToInt32(instr[i-1])<10)

 decint += Convert.ToInt32( instr[i - 1]);

 if (instr[i - 1] == 'A') decint += 10\*x;

 if (instr[i - 1] == 'B') decint += 11 \* x;

 if (instr[i - 1] == 'C') decint += 12 \* x;

 if (instr[i - 1] == 'D') decint += 13 \* x;

 if (instr[i - 1] == 'E') decint += 14 \* x;

 if (instr[i - 1] == 'F') decint += 15 \* x;

 x = x \* 16;

 }

 result = decint.ToString();

 return result;

 }

**Programming / Database Question 5**

**Explain following method.**

 private void prime(int n)

 {

 int i = 3, count, c;

 if (n >= 1)

 {

 listBox1.Items.Add(2.ToString());

 }

 for (count = 2; count <= n; )

 {

 for (c = 2; c <= i - 1; c++)

 {

 if (i % c == 0)

 break;

 }

 if (c == i)

 {

 listBox1.Items.Add(i.ToString());

 count++;

 }

 i++;

 }

 }

**Programming / Database Question 6**

**Explain the following method.**

 private void fibonacci(int n)

 {

 int first = 0, second = 1, next, c;

 for (c = 0; c < n; c++)

 {

 if (c <= 1)

 next = c;

 else

 {

 next = first + second;

 first = second;

 second = next;

 }

 listBox1.Items.Add(next.ToString());

 }

 }

**Programming / Database Question 7**

**Explain the following program.**

 static public int[] arr = new int[100];

 static public int no;

 private void bubblesort()

 {

 int c, d, swap;

 for (c = 0 ; c < ( no - 1 ); c++)

 {

 for (d = 0 ; d < no - c - 1; d++)

 {

 if (arr[d] > arr[d+1]) /\* For decreasing order use < \*/

 {

 swap = arr[d];

 arr[d] = arr[d+1];

 arr[d+1] = swap;

 }

 }

 }

 for ( c = 0 ; c < no ; c++ )

 listBox2.Items.Add(arr[c].ToString());

 }

 private void button1\_Click(object sender, EventArgs e)

 {

 no = Convert.ToInt16(textBox1.Text);

 Random ran = new Random();

 for (int i = 0; i < no; i++)

 {

 arr[i] = ran.Next(1, 100);

 listBox1.Items.Add(arr[i].ToString());

 }

 bubblesort();

 }

**Programming / Database Question 8**

**Explain the following program.**

 private void string1()

 {

 textBox1.Text = "Once Upon A Time In America";

 string s = textBox1.Text;

 foreach (string ss in s.Split(' '))

 listBox1.Items.Add(ss);

 }

 private void string2()

 {

 listBox1.Items.Clear();

 textBox1.Text = "Once,Upon:A/Time\\In\'America";

 string t = textBox1.Text;

 char[] sep2 = new char[] { ' ', ',', ':', '/', '\\', '\'' };

 foreach (string ss in t.Split(sep2))

 listBox1.Items.Add(ss);

 }

 private void string3()

 {

 listBox1.Items.Clear();

 textBox1.Text = "Once Upon A Time In America";

 string u = textBox1.Text;

 char[] sep3 = new char[] { ' ' };

 foreach (string ss in u.Split(sep3))

 listBox1.Items.Add(ss);

 }

 private void button1\_Click(object sender, EventArgs e)

 {

 string1();

 MessageBox.Show("to test 2");

 string2();

 MessageBox.Show("to test 3");

 string3();

 MessageBox.Show("That's all");

 }

**Programming / Database Question 9**

**Explain the following code. What will the output look like?**

int intSeek = 1;

int intFound = 0;

do

{

 if ((intSeek % 3) == 0)

 {

 lstResults.Items.Add(intSeek.ToString());

 intFound++;

 }

 intSeek++;

} while (intFound < 10);