**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);