

CS101 SOLVED ASSIGNMENT 11/2014

Question 1

Write below code in a notepad file and save it as itsol.htm, run the file in internet explorer to verify.

```
<HTML>
<HEAD>
<TITLE>IT Solutions</TITLE>
</HEAD>
<BODY>
<h1> <B> Welcome to IT Solutions </B> </h1>
<P><B>Software Support </B><BR>
<B>Hardware Support </B><BR></P>
<P>You can also email us at <A
HREF="mailto:itsol@xyz.com">itsol@xyz.com</A><BR></P>
</BODY>
</HTML>
```

Question No 2:

Marks 10

After designing that web page, your next task at XYZ Internationals is to develop a Scientific Calculator for binary operations. Your supervisor, **Mr. A**, suggests you to first perform certain binary operations to refresh your concepts for better logic development which involve the following:

- a) i) Convert 110111011 into decimal.

Ans:

110111011

$$\begin{aligned} &= (1 \times 2)^0 + (1 \times 2)^1 + (0 \times 2)^2 + (1 \times 2)^3 + (1 \times 2)^4 + (1 \times 2)^5 + (0 \times 2)^6 + (1 \times 2)^7 + (1 \times 2)^8 \\ &= (2)^0 + (2)^1 + (0)^2 + (2)^3 + (2)^4 + (2)^5 + (0)^6 + (2)^7 + (2)^8 \\ &= 1 + 2 + 0 + 8 + 16 + 32 + 0 + 128 + 256 \\ &= 443 \end{aligned}$$

- ii) Convert 128 into binary.

Ans:

2	128	
2	64	0
2	32	0
2	16	0
2	8	0
2	4	0
2	2	0
	1	0

so 128 in binary would be 10000000

b) Complete the truth table for following Expression.

$$AB' (A+C)$$

A	B	C	B'	A B'	A+C	A B' (A+C)
0	0	0	1	0	0	0
0	0	1	1	0	1	0
0	1	0	0	0	0	0
0	1	1	0	0	1	0
1	0	0	1	1	1	1
1	0	1	1	1	1	1
1	1	0	0	0	1	0
1	1	1	0	0	1	0