1.

```
boolean isSimilar(BTtree a,BTtree b)
{
   if (a==null && b==null) return true;
   if (a==null || b==null) return false;
   return (isSimilar(a.lch,b.lch)&isSimilar(a.rch,b.rch));
}
```

2.

 $content | huffman \ code \ -|-0|001\ 1|0000\ 2|01011\ 3|010001\ 4|1100\ 5|0001\ 6|01010\ 7|1101\ 8|1110\ 9|1111\ colon|010000\ newline | 01001\ space | 011\ comma|10$

compress effiency:(1-12914/14592)=11.50%