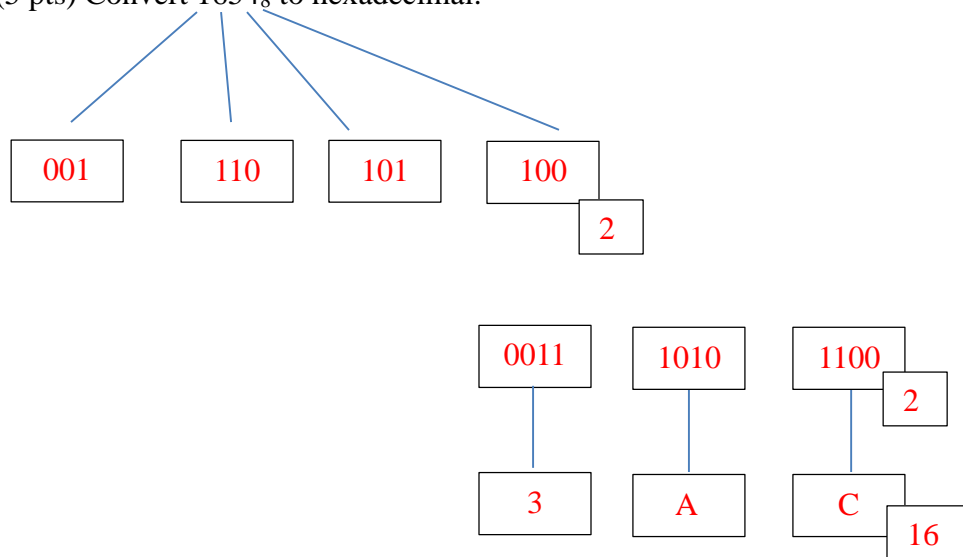


5) (10 pts) ALG (Base Conversion)

(a) (5 pts) Convert  $1654_8$  to hexadecimal.



$3AA_{16}$

**Grading: 2 pts for converting from base 8 to base 2, 1 pt for regrouping from sets of three values to sets of four values, 2 pts for converting regrouped base 2 to base 16.**

(b) (5 pts) Convert  $1925_{10}$  to octal.

$1925/8$	$=$	$240$	with remainder	5
$240/8$	$=$	$30$	with remainder	0
$30/8$	$=$	$3$	with remainder	6
$3/8$	$=$	$0$	with remainder	3

Answer:  $1928_{10} = 3605_8$

**Grading: 1 pt for each division by 8 with remainder, 1 pt for final solution in correct order**