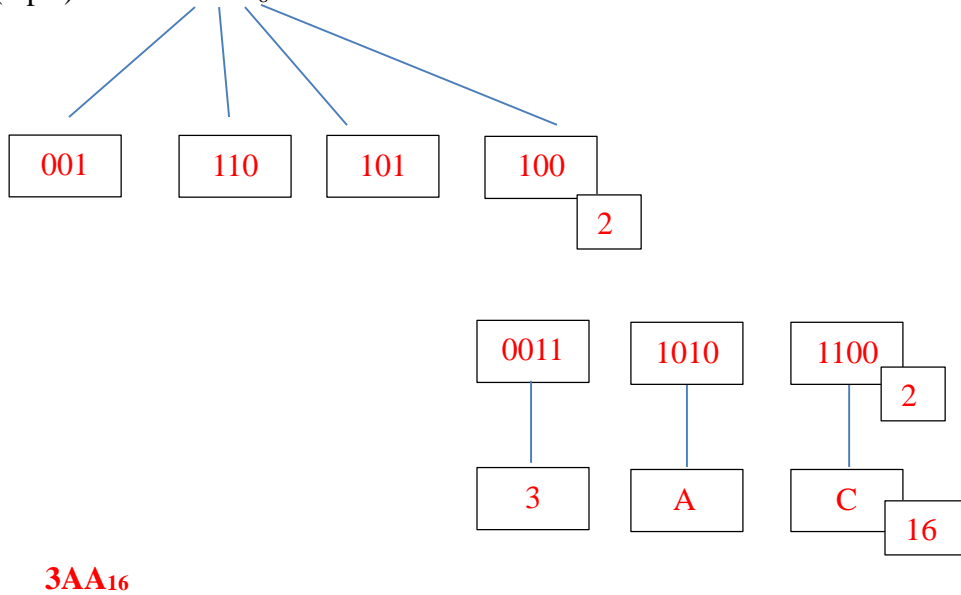


5) (10 pts) ALG (Base Conversion)

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



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