

**UNCC, Department of Electrical and Computer Engineering
ECGR4101/5101, Fall 2005, Homework #4, Solution**

0. How long did this homework take you? (1 point)

1. (8 points)

Variable	Address	Intermediate Values					Final Value
s1	600	“one five”	“onkcm”				“onkcm”
c	620	‘c’					‘c’
d	621	‘i’					‘i’
i	622	1	581	560			560
j	624	241	581				581
k	626	314	1141				1141
pc	628	605	602	603			603
pi1	630	624					624
pi2	632	622	620				620

2. (6 points)

a. int a[6];

Address	Array Element	Which byte?
a	a[0]	LSB
a+1	a[0]	MSB
a+2	a[1]	LSB
a+3	a[1]	MSB
a+4	a[2]	LSB
a+5	a[2]	MSB
a+6	a[3]	LSB
a+7	a[3]	MSB
a+8	a[4]	LSB
a+9	a[4]	MSB
a+10	a[5]	
a+11	a[5]	
a+12		
a+13		
a+14		
a+15		

b. unsigned char b[2][4];

Address	Array Element	Which byte?
b	b[0][0]	the only byte!
b+1	b[0][1]	the only byte!
b+2	b[0][2]	the only byte!
b+3	b[0][3]	the only byte!
b+4	b[1][0]	the only byte!
b+5	b[1][1]	the only byte!
b+6	b[1][2]	the only byte!
b+7	b[1][3]	the only byte!
b+8		
b+9		
b+10		
b+11		
b+12		
b+13		
b+14		
b+15		

3. (5 points) Write your opinions coherently and intelligently.