System-oriented Programming Spring 2018

S02

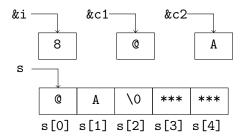
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Exercice 12

a)



b)

Vari	able	Address			
Name	Value	Name	Possible value		
i	8	&i	0x00		
c1	@	&c1	0x20		
c2	A	&c2	0x40		
	@A	\mathbf{s}	0x60		

 $\mathbf{c})$

${f Address}$		Big e	ndian	l	${f Little\ endian}$				${f Address}$	
&i	0	0	0	8		0	0	0	8	&i
&c1	@	***	***	***		***	***	***	@	&c1
&c2	A	***	***	***		***	***	***	A	&c2
\mathbf{s}	0	A	\0	***		***	\0	A	@	s
s+4	***	***	***	***		***	***	***	***	s+4

Address	Big endian					
0x0	0	0	0	8		
0x4	0x40	***	***	***		
0x8	0x41	***	***	***		
0xc	0x40	0x41	***	***		
0x10	***	***	***	***		

	${f Address}$			
0	0	0	8	0x0
***	***	***	0x40	0x4
***	***	***	0x41	0x8
***	***	0x41	0x40	0xc
***	***	***	***	0x10

d)

Exercice 13

a)

First, the value of d would be 2. To figure out this, we just read the documentation of the read function :

RETURN VALUE

On success, these functions return the number of input items successfully matched and assigned; this can be fewer than provided for, or even zero, in the event of an early matching failure.

The value EOF is returned if the end of input is reached before either the first successful conversion or a matching failure occurs. EOF is also returned if a read error occurs, in which case the error indicator for the stream (see ferror(3)) is set, and erron is set to indicate the error.

b)