

Chapter 16

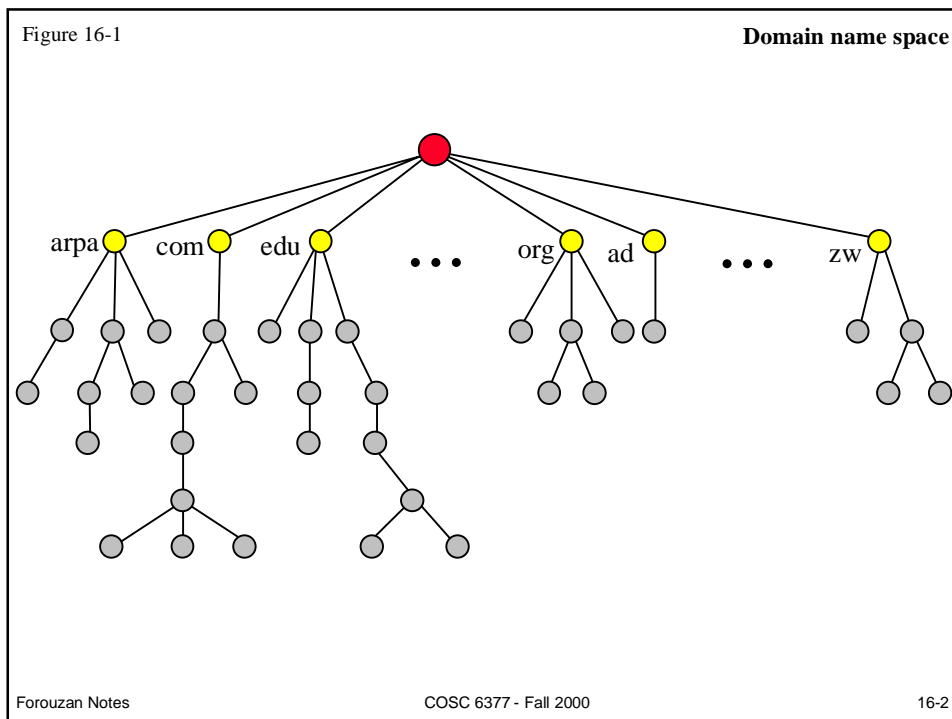
DNS

- **Name Space**
- **Domain Name Space**
- **Distribution of Name Space**
- **DNS in the Internet**
- **Resolution**
- **DNS Messages**
- **Types of Records**
- **Compression**

Forouzan Notes

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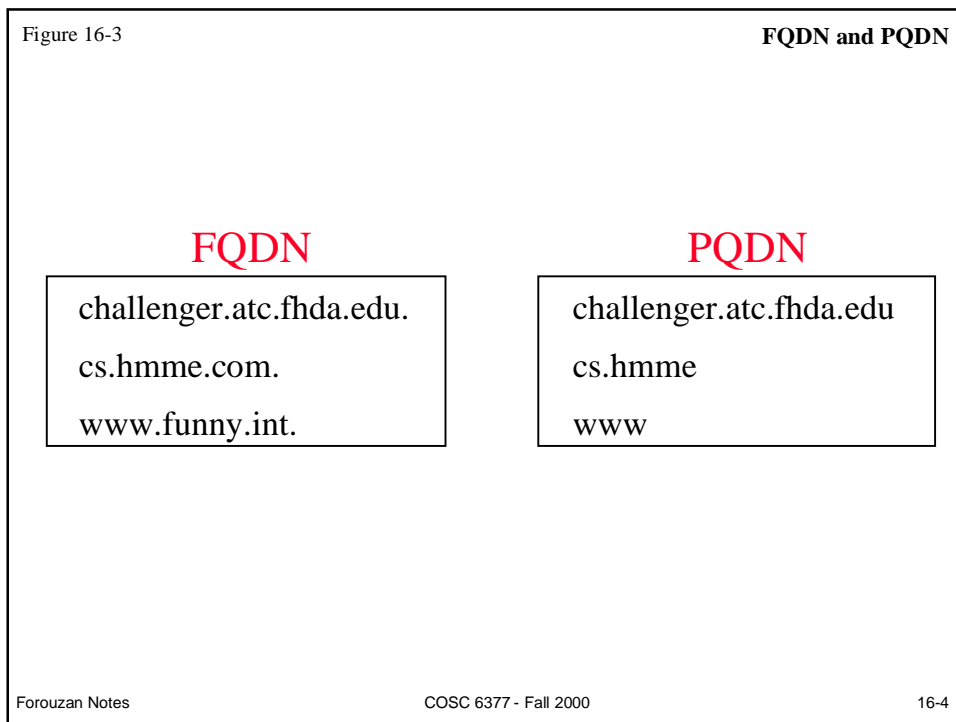
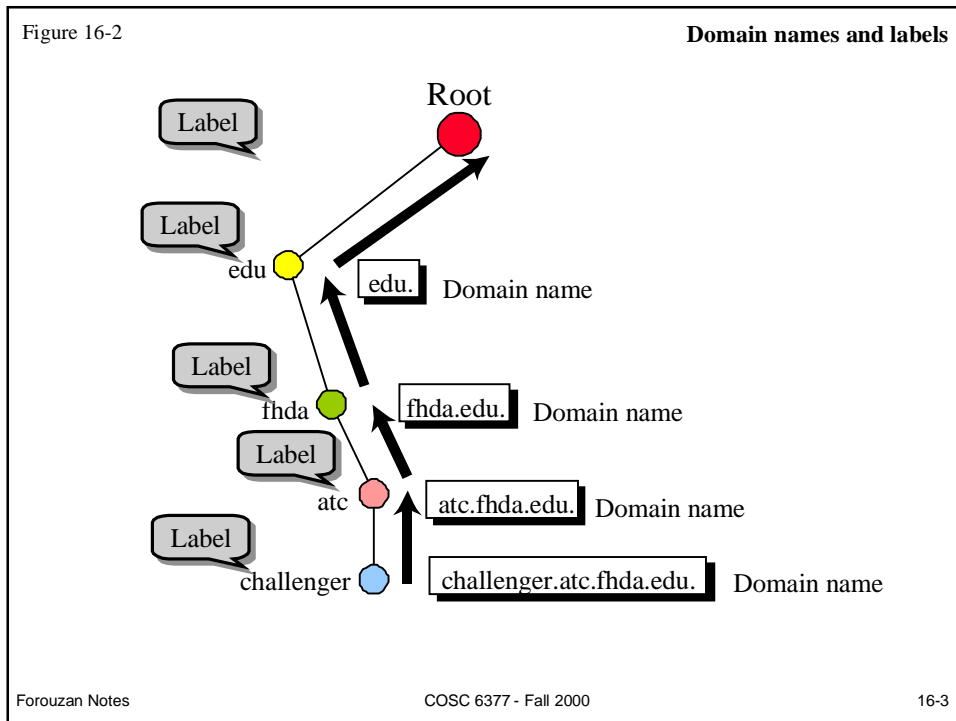
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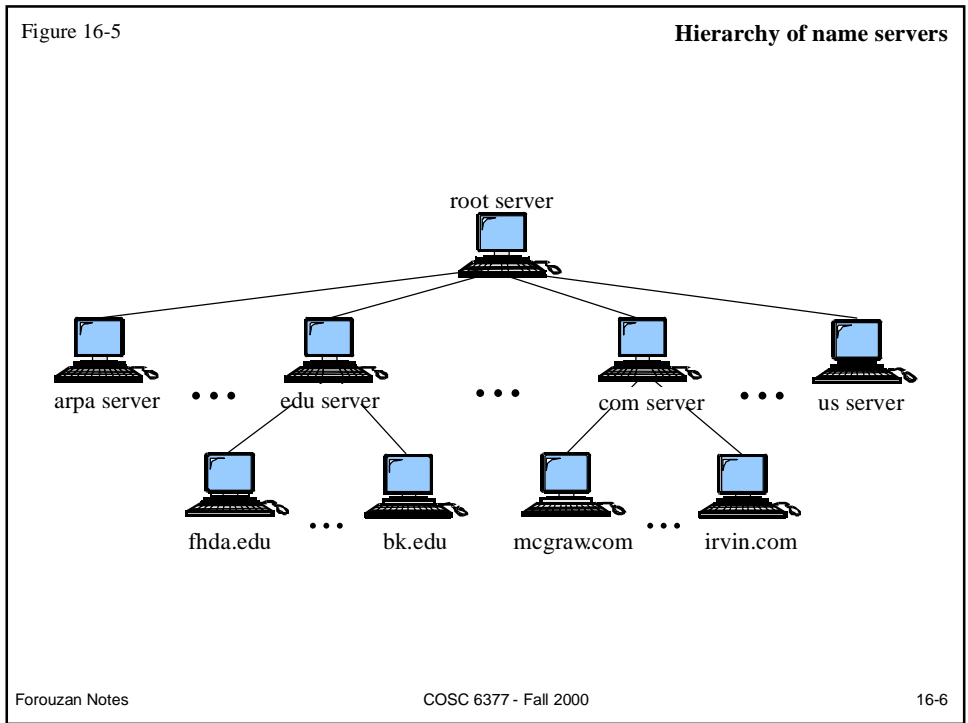
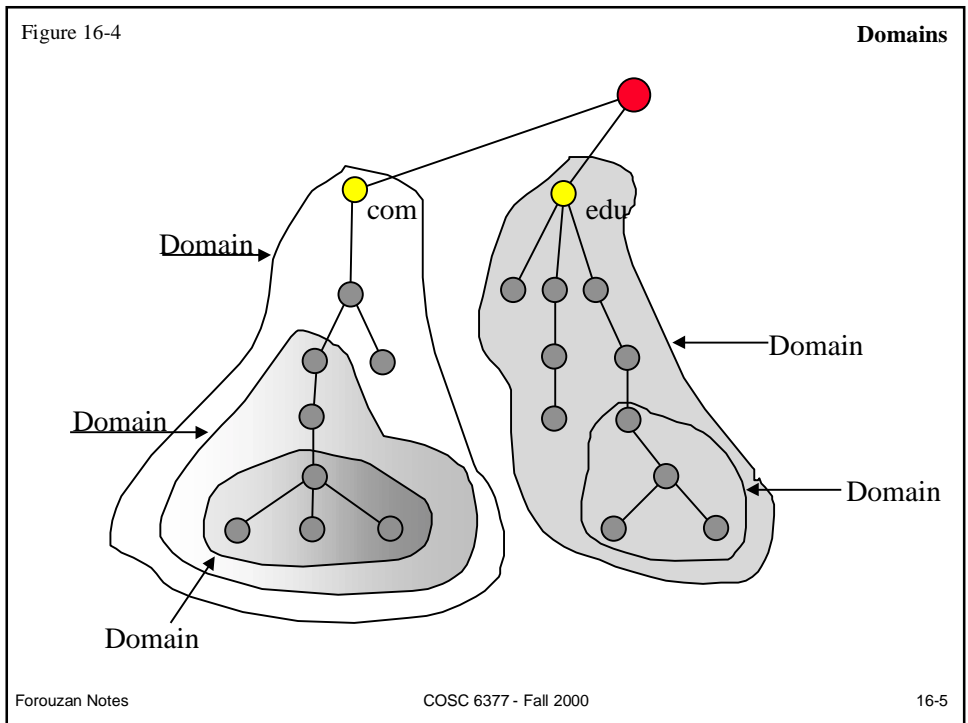


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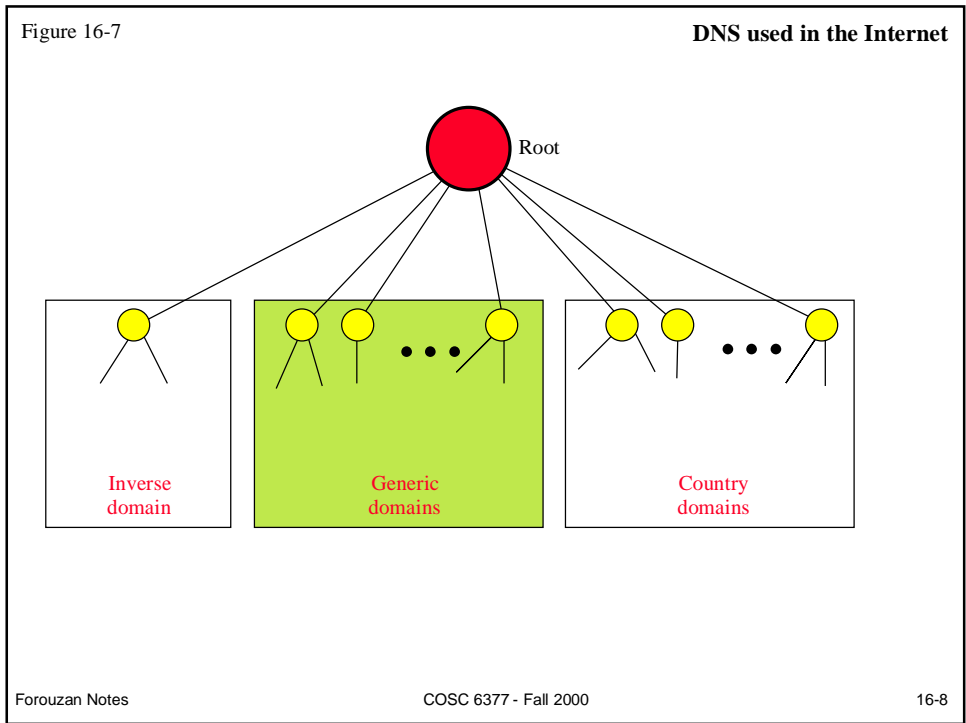
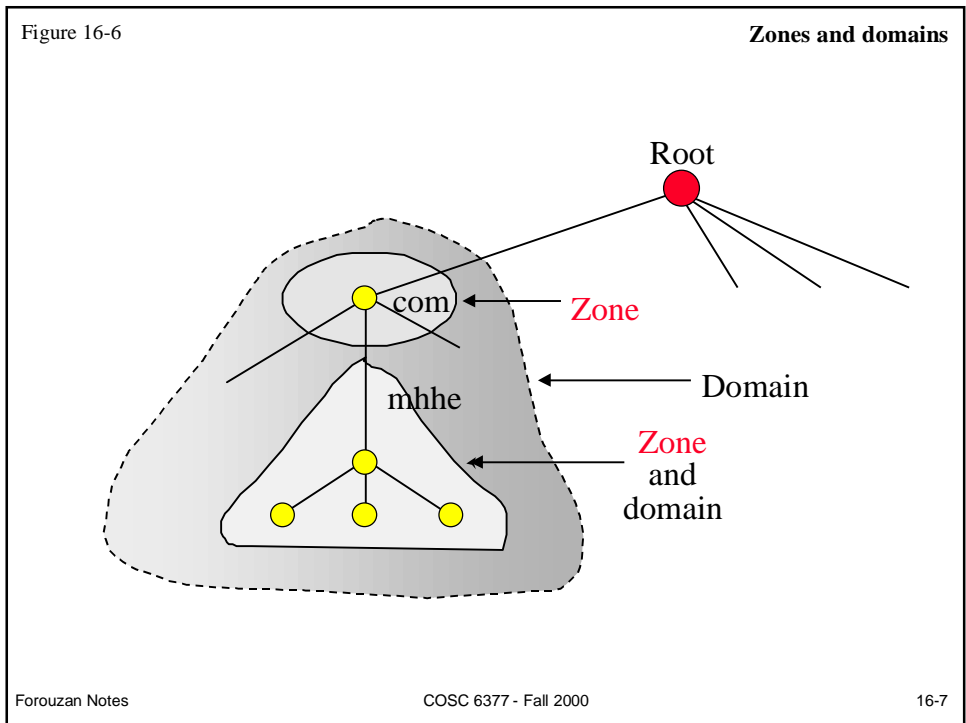
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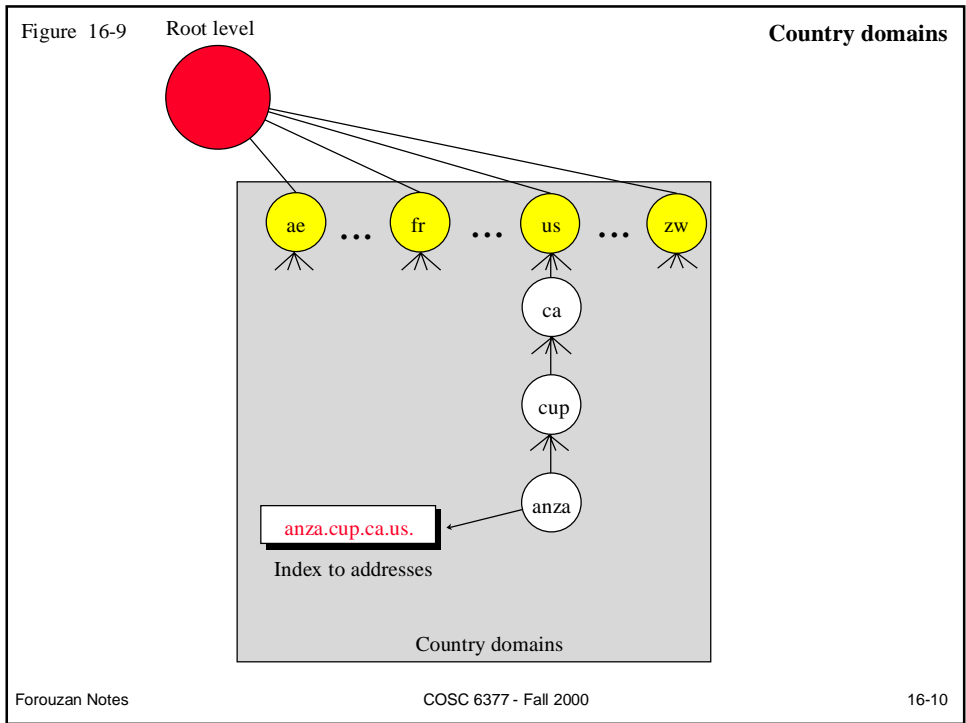
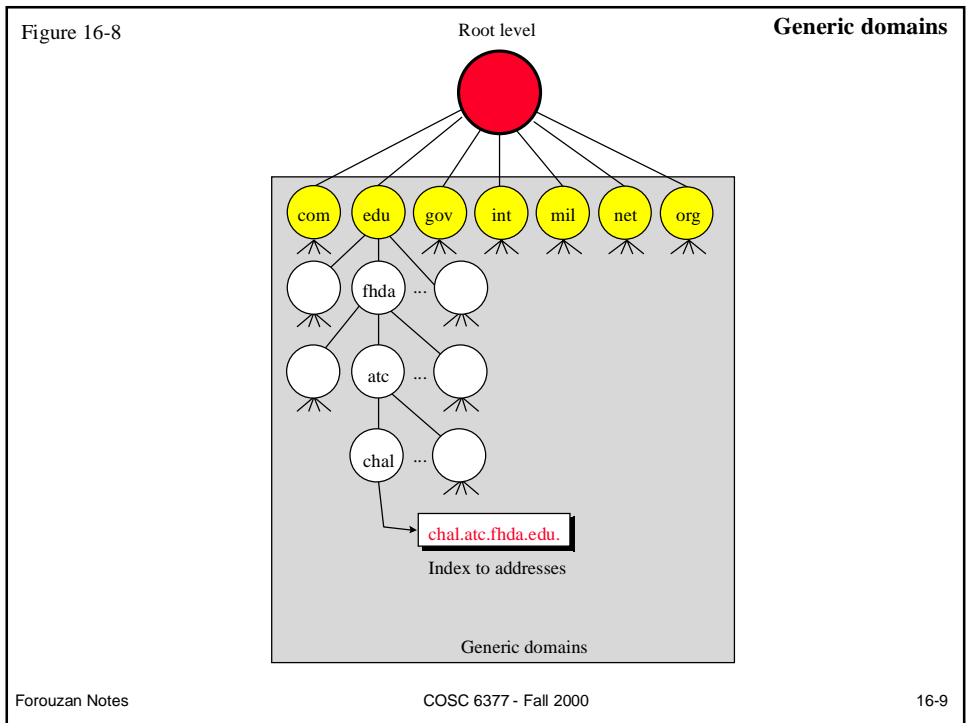




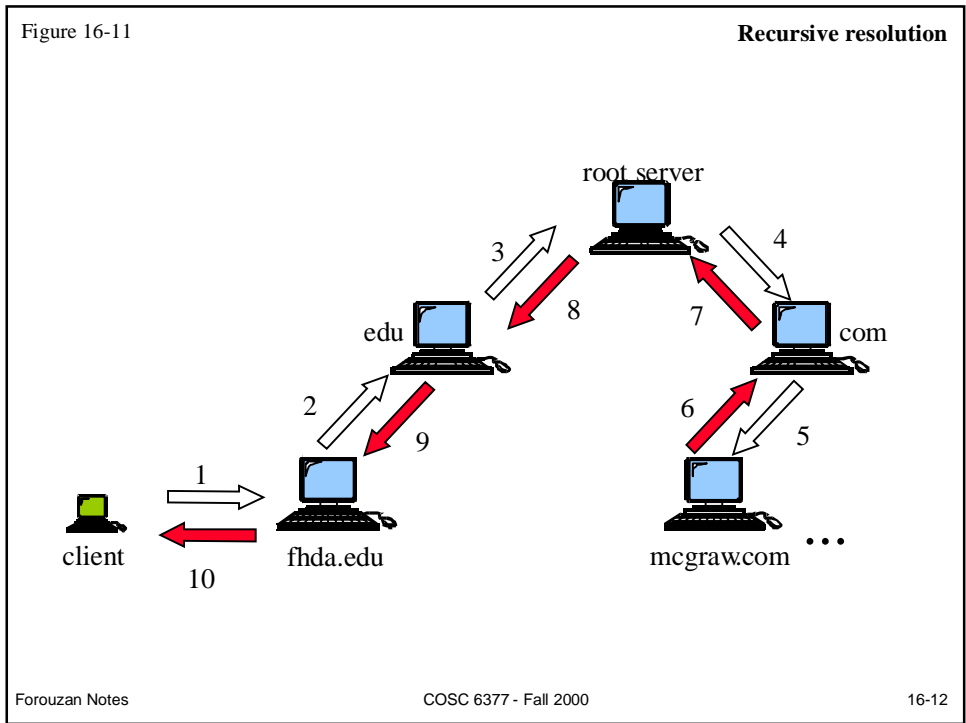
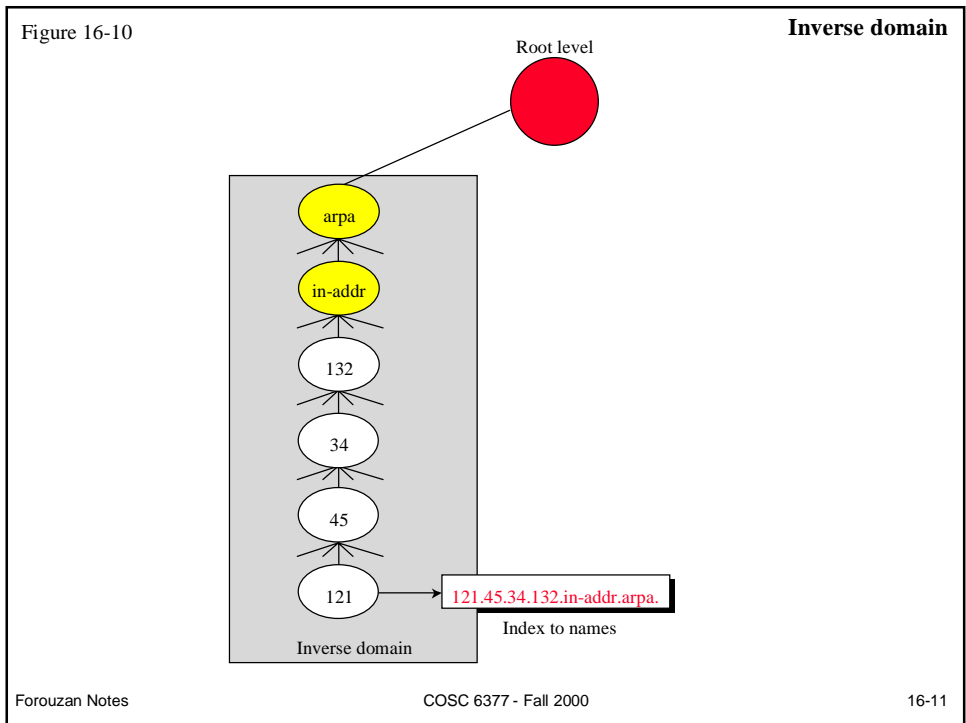
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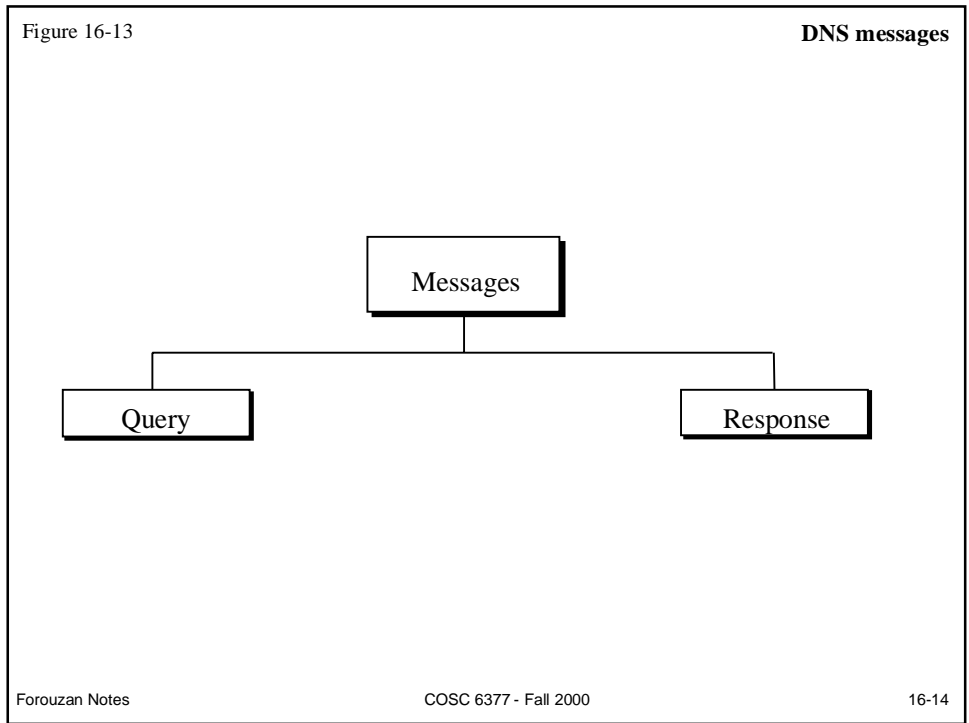
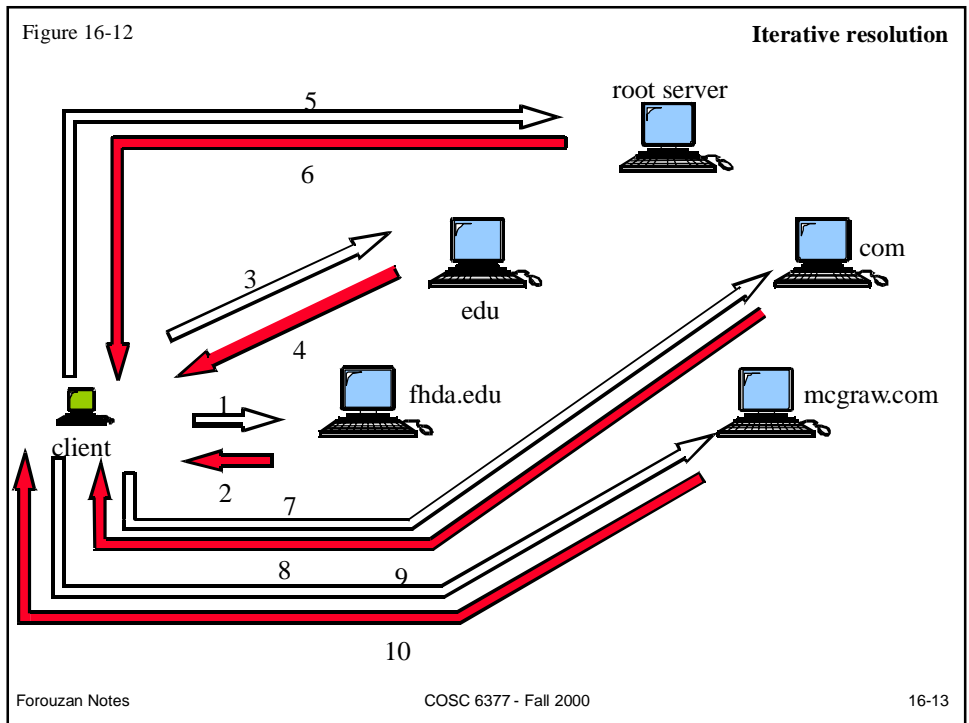


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Slides from *TCP/IP* - Forouzan





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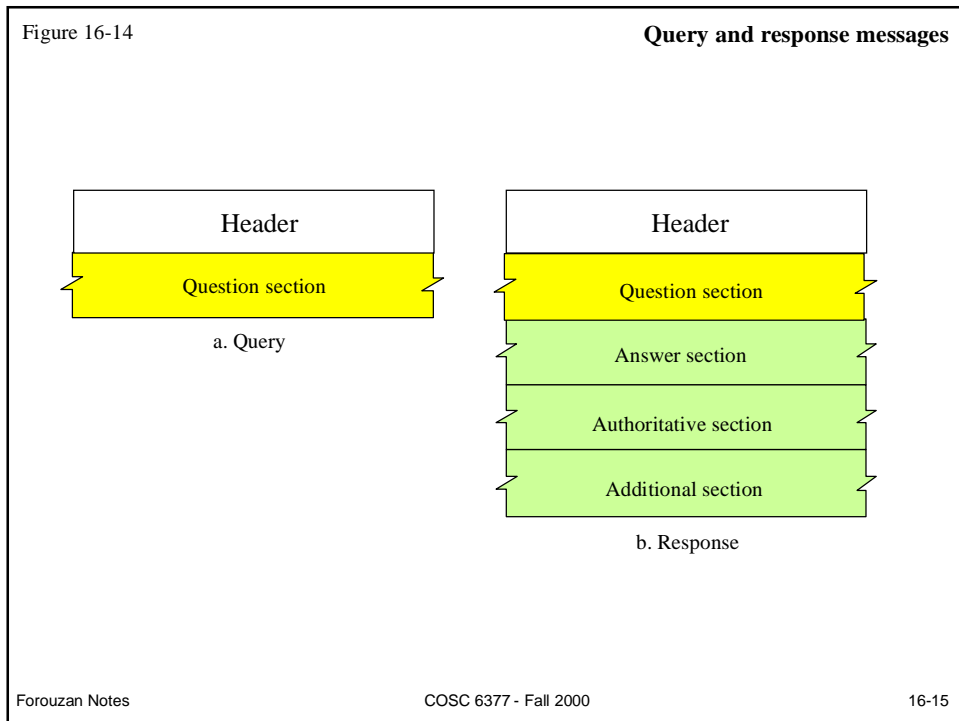
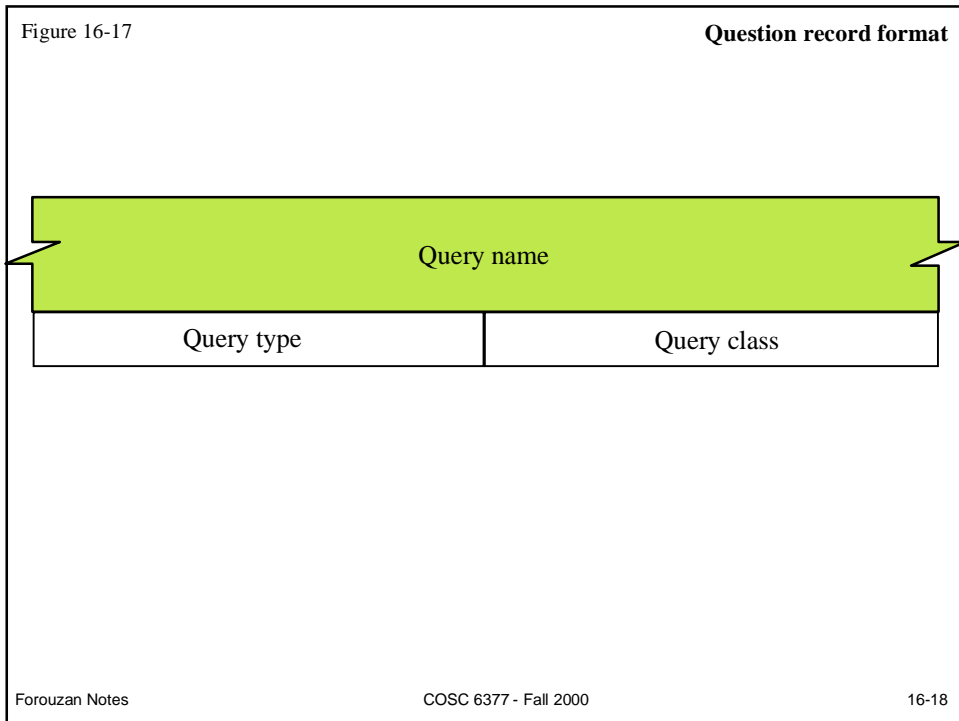
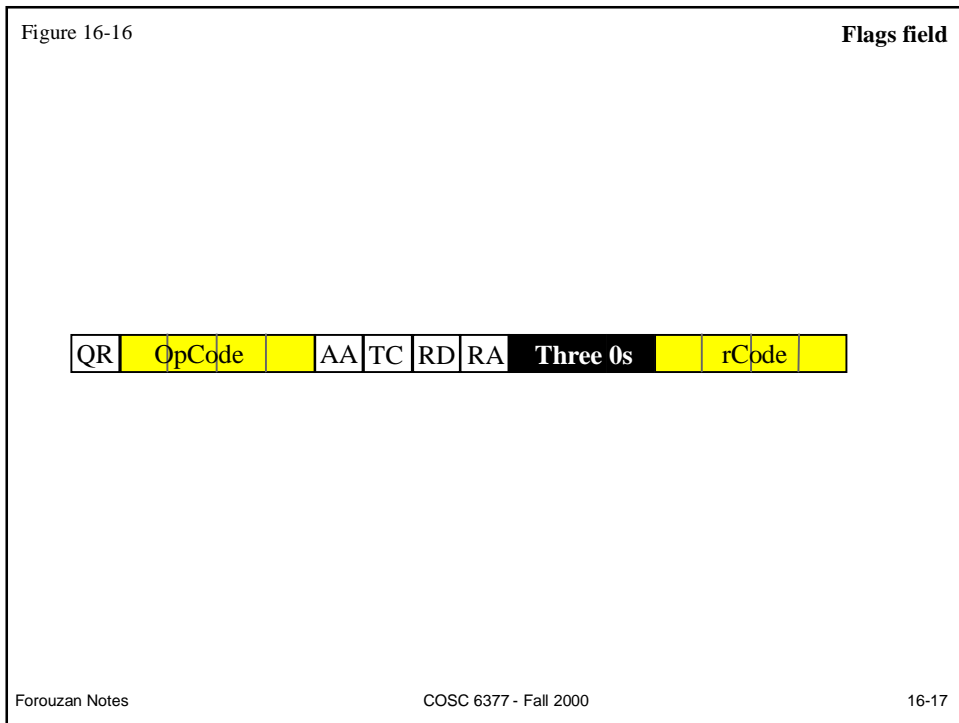


Figure 16-15 **Header format**

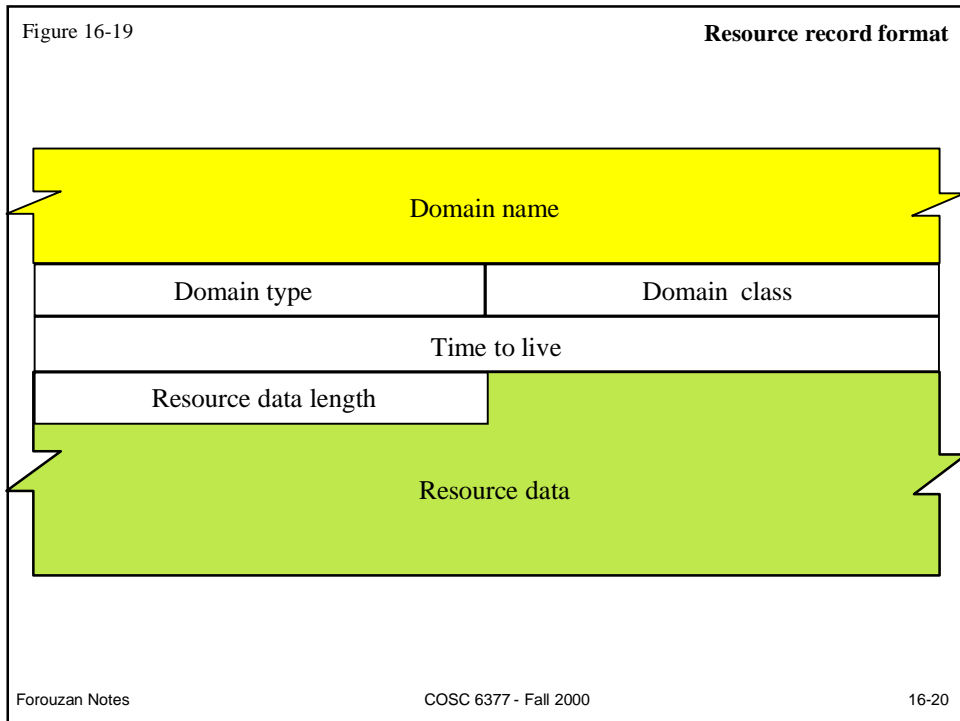
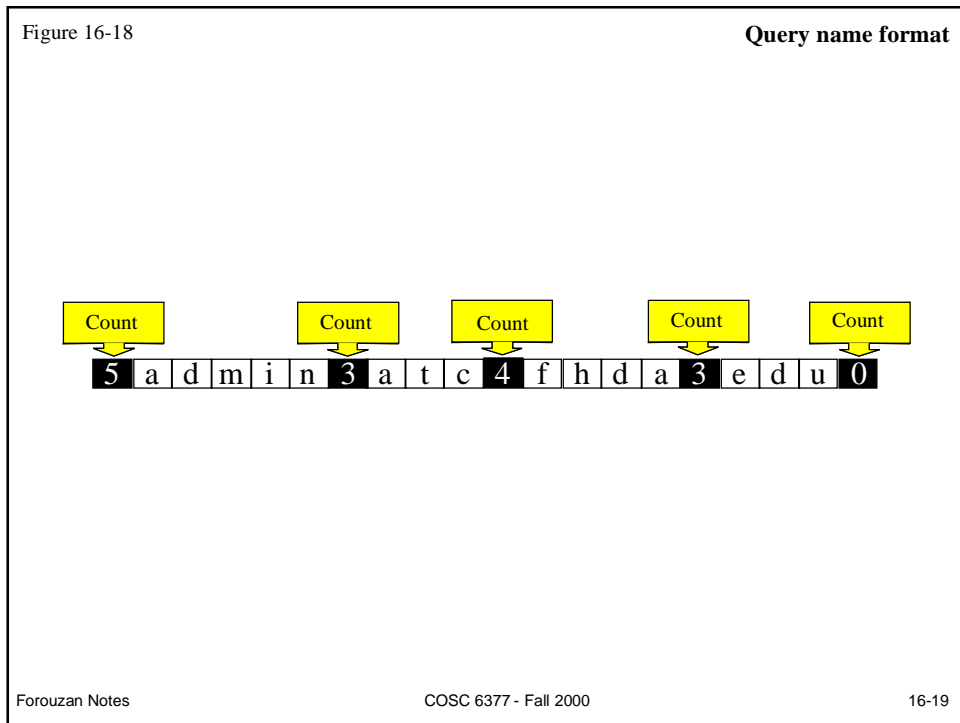
Identification	Flags
Number of question records	Number of answer records (All 0s in query message)
Number of authoritative records (All 0s in query message)	Number of additional records (All 0s in query message)

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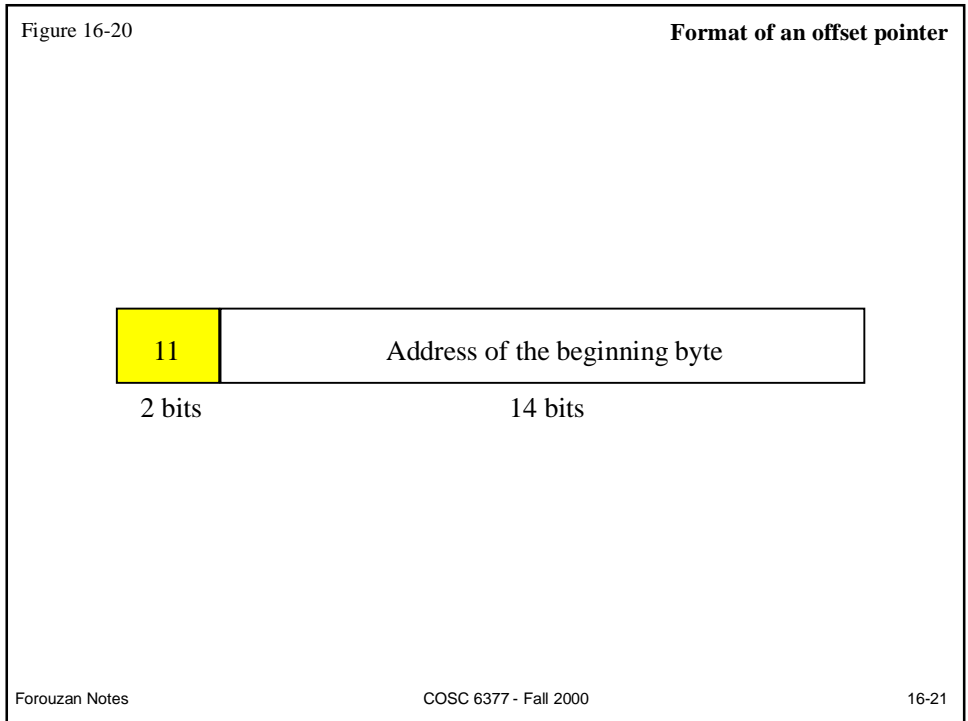
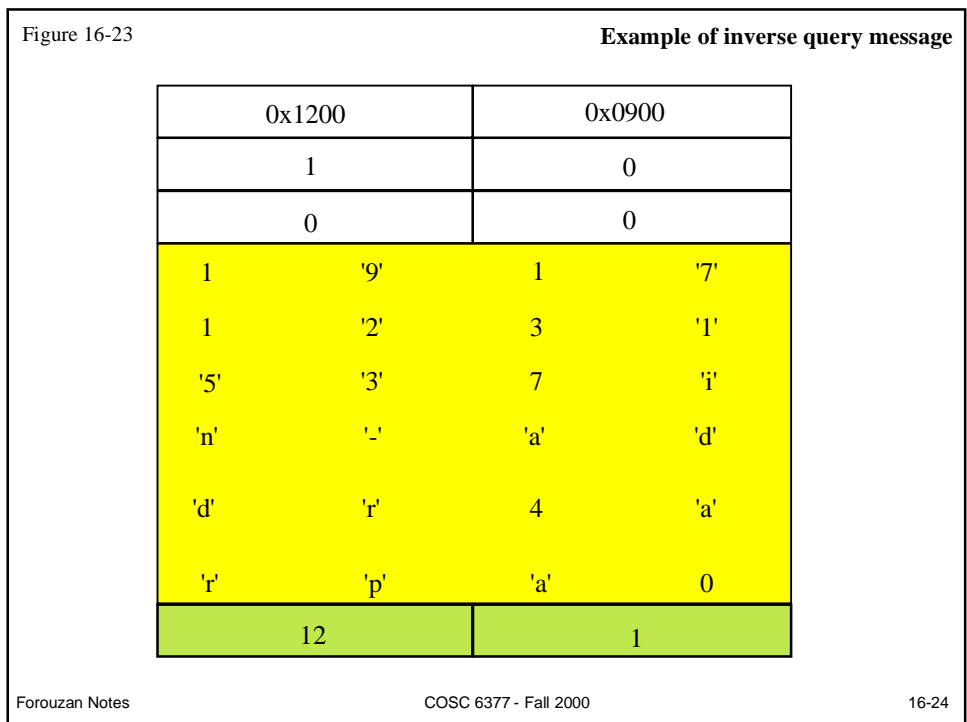
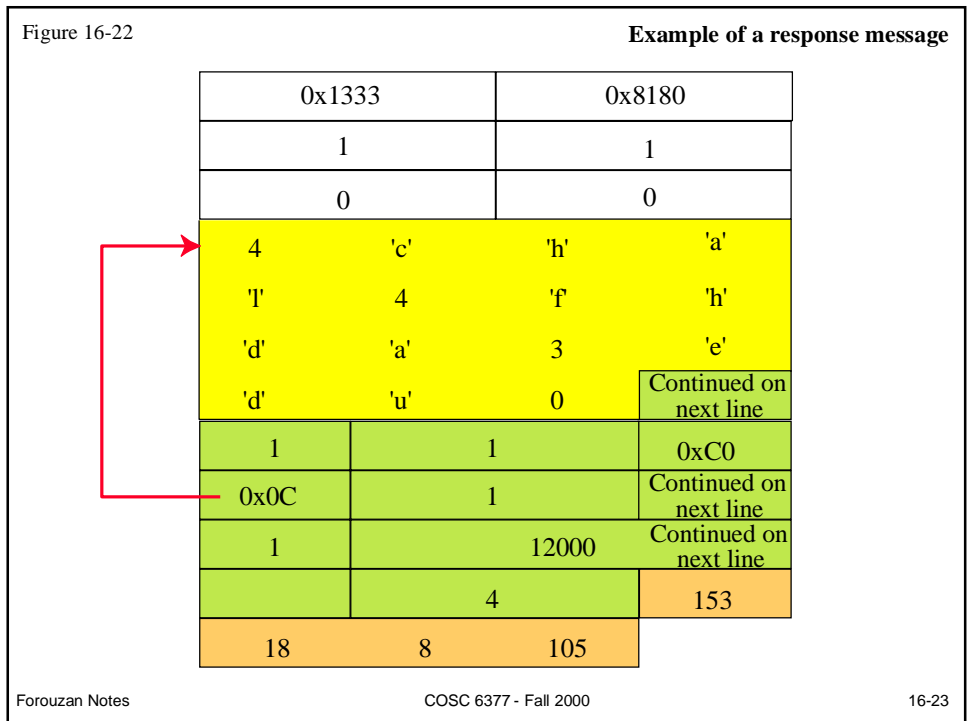


Figure 16-21 Example of a query message

0x1333		0x0100	
1		0	
0		0	
4	'c'	'h'	'a'
'l'	4	'f'	'h'
'd'	'a'	3	'e'
'd'	'u'	0	Continued on next line
1	1		

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Figure 16-24

Example of inverse response message

0x1200		0x8D80	
1		1	
0		0	
1	'9'	1	'7'
1	'2'	3	'1'
'5'	'3'	7	'I'
'n'	'.'	'a'	'd'
'd'	'r'	4	'a'
'r'	'p'	'a'	0
12		1	
0xC00C		12	
1		Continued on next line	
24000		10	
4	'm'	'h'	'h'
'e'	3	'c'	'o'
'm'	0		