Secure Communications

Week 4

Ciphers and Fundamentals (Part 2)

Sections

C. Character mapping

D. Test

1. Crack some Caesar codes at:
   http://asecuritysite.com/tests/tests?sortBy=caesar

2. Determine some hex conversions at:
   http://asecuritysite.com/tests/tests?sortBy=hex01

Your score

Correct: 16, Incorrect: 0

Correct

Question	Your Answer	Feedback
What is the binary format for decimal value of 238:	11101110	Link
What is the hex format for decimal value of 139:	8B	Link
What is the hex format for decimal value of 242:	F2	Link
What is the binary format for decimal value of 243:	11110011	Link
What is the hex format for decimal value of 223:	DF	Link
What is the binary format for decimal value of 192:	11000000	Link
What is the hex format for decimal value of 141:	8D	Link
What is the binary format for decimal value of 62:	00111110	Link
What is the binary format for decimal value of 164:	10100100	Link
What is the binary format for decimal value of 183:	10110111	Link
What is the binary format for decimal value of 41:	00101001	Link
What is the binary format for decimal value of 186:	10111010	Link
What is the hex format for decimal value of 217:	D9	Link
What is the binary format for decimal value of 177:	10110001	Link
What is the hex format for decimal value of 188:	BC	Link
What is the hex format for decimal value of 161:	A1	Link

3. Determine some Base64 conversions:
   http://asecuritysite.com/tests/tests?sortBy=ascii01

Your score

Correct: 10, Incorrect: 0

Correct

Question	Your Answer	Feedback
What is the Base64 value for the word of georgia	Z2VvcmdpYQ==	Link
What is the Base64 value for the word of heart	aGVhcnQ=	Link
What is the Base64 value for the word of brighton	YnJpZ2h0b24=	Link
What is the Base64 value for the word of greek	Z3JlZWs=	Link
What is the Base64 value for the word of macedonia	bWFjZWRvbmlh	Link
What is the Base64 value for the word of dumfries	ZHVtZnJpZXM=	Link
What is the Base64 value for the word of france	ZnJhbmNl	Link
What is the Base64 value for the word of december	ZGVjZW1iZXI=	Link
What is the Base64 value for the word of luton	bHV0b24=	Link
What is the Base64 value for the word of india	aW5kaWE=	Link

4. Now complete the test at: http://asecuritysite.com/tests/tests?sortBy=crypto01

Your score

Correct: 10, Incorrect: 0

Correct

Question	Your Answer	Feedback
For an 8-bit value of 0x10, what is the result when we rotate the bits by one place to the right:	0x08	
For a 12-bit encryption key, how many keys are possible:	4,096	
For a 14-bit encryption key, how many keys are possible:	16,384	
What is the GCD of 56 and 42:	14	
For a 17-bit encryption key, how many keys are possible:	131,072	
What is the result of 99 mod 20:	19	
For a 13-bit encryption key, how many keys are possible:	8,192	
What is the GCD for 64 and 32:	32	
For a 9-bit encryption key, how many keys are possible:	512	
For a 7-bit encryption key, how many keys are possible:	128	