Sistemas Informáticos (Computer Systems)  
Unit 02. Activities 01 - Solutions

short line

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Unit 02. Activities 01 - Solutions

# Exercise 01

a) 1001(2 b) 110010(2 c) 1010(2 d) 100101,101(2 e) 1011(2

*a) 9 b) 50 c) 10 d) 37,625 e) 11*

# Exercise 02

a) 8(10 b) 512(10 c) 20,625(10 d) 255(10 e) 3560,75(10

*a) 1000 b) 1000000000 c) 10100,101 d) 11111111 e) 110111101000,11*

# Exercise 03

a) 100100101(2 b) 1000000000(2 c) 1001001(2 d) 11111(2

*a) 125 b) 200 c) 49 d) 1F*

# Exercise 04

a) 5A43(16 b) BEA(16 c) 23A(16 d) 100(16

*a) 101101001000011 b) 101111101010 c) 1000111010 d) 100000000*

e) F410(16

*e) 1111010000010000*

# Exercise 05

a) 100101(2 b) 11101(2 c) 110011(2 d) 100(2 e) 11010101(2

*a) 45(8 b) 35(8 c) 63(8 d) 4(8 e) 325(8*

# Exercise 06

a) 521(8 b) 1234(8 c) 100(8 d) 7543(8 e) 111(8

*a) 101010001 b) 1010011100 c) 1000000 d) 111101100011 e) 1001001*

# Exercise 07

a) F2A3(16 b) 4227(16 c) 4227(8 d) AAFF(16

*a) 62115 b) 16935 c) 2199 d) 43775*

# Exercise 08

a) 16(10 b) 427(10 c) 255(10 d) 534(10

*a) 10 b) 1AB c) FF d) 216*

# Exercise 09

a) 16(10 b) 427(10 c) 255(10 d) 534(10

*a) 20 b) 653 c) 377 d) 1026*

# Exercise 10

1001100

# Exercise 11

100010

# Exercise 12

1010110

# Exercise 13

10110100

# Exercise 14

a) 10111010 b) 11000101 c) 11000110 d) 01000110

# Exercise 15

42

# Exercise 16

a) 01000110 b) 1100010 c) 00000111 d) 11111000

# Exercise 17

6

# Exercise 18

4096

# Exercise 19

You can find information about this question in:

* <http://www.unicode.org/standard/translations/spanish.html>
* <http://informaticamejoras.blogspot.com.es/2009/11/unicode.html>

# Exercise 20

**DEC**: 83 105 115 116 101 109 97 115 32 100 101 32 114 101 112 114 101 115 101 110 116 97 99 105 162 110

**HEX**: 53 69 73 74 65 6D 61 73 20 64 65 20 72 65 70 72 65 73 65 6E 74 61 63 69 A2 6E

**OCT**: 123 151 163 164 145 155 141 163 40 144 145 40 162 145 160 162 145 163 145 156 164 141 143 151 242 156

# Exercise 21

*-19.75*

# Exercise 22

a) 34000000 MB b) 0,0000012 EB c) 12500 Mb → kB d) 453,6 GB/Week

# Exercise 23

105: 1101001 1101001 |101

5: 101 101 10101 = 21

00110

101

00101

101

000

# Exercise 24, 25 and 26

Try to do them by yourself and share it in forum :)