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Lớp: 10 – ĐH – CNPM2

BÀI KIỂM TRA 15’

Câu 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ASCII (Decimal) | Binary (8-bit) | XOR với 46 | Kết quả (Binary) | Kết quả (Decimal) | Ký tự ASCII |
| 116 | 01110100 | 00101110 | 01011010 | 90 | Z |
| 97 | 01100001 | 00101110 | 01001111 | 79 | O |
| 110 | 01101110 | 00101110 | 01000000 | 64 | @ |
| 99 | 01100011 | 00101110 | 01001101 | 77 | M |
| 111 | 01101111 | 00101110 | 01000001 | 65 | A |
| 110 | 01101110 | 00101110 | 01000000 | 64 | @ |
| 103 | 01100111 | 00101110 | 01001001 | 73 | I |
| 109 | 01101101 | 00101110 | 01000011 | 67 | C |
| 97 | 01100001 | 00101110 | 01001111 | 79 | O |
| 110 | 01101110 | 00101110 | 01000000 | 64 | @ |
| 103 | 01100111 | 00101110 | 01001001 | 73 | I |

Câu 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ASCII (Decimal) | Binary (8-bit) | XOR với 44 | Kết quả (Binary) | Ký tự ASCII |
| 116 | 01110100 | 00101100 | 01011000 | X |
| 104 | 01101000 | 00101100 | 01000100 | D |
| 97 | 01100001 | 00101100 | 01001101 | M |
| 110 | 01101110 | 00101100 | 01000010 | B |
| 104 | 01101000 | 00101100 | 01000100 | D |
| 110 | 01101110 | 00101100 | 01000010 | B |
| 104 | 01101000 | 00101100 | 01000100 | D |
| 97 | 01100001 | 00101100 | 01001101 | M |
| 110 | 01101110 | 00101100 | 01000010 | B |

Câu 3:

|  |  |  |  |
| --- | --- | --- | --- |
| Ký tự mã hóa | ASCII (C) | Công thức P=(C−17) mod  26P = (C - 17) \mod 26P=(C−17) mod26 | Ký tự giải mã |
| D | 68 | (68−17)=51(68 - 17) = 51(68−17) =51 → 'Q' | Q |
| F | 70 | (70−17)=53(70 - 17) = 53(70−17) =53 → 'S' | S |
| E | 69 | (69−17)=52(69 - 17) = 52(69−17)=52 → 'R' | R |
| K | 75 | (75−17)=58(75 - 17) = 58(75−17)=58 → 'X' | X |
| R | 82 | (82−17)=65(82 - 17) = 65(82−17)=65 → 'A' | A |
| E | 69 | (69−17)=52(69 - 17) = 52(69−17)=52 → 'R' | R |
| T | 84 | (84−17)=67(84 - 17) = 67(84−17)=67 → 'C' | C |
| F | 70 | (70−17)=53(70 - 17) = 53(70−17)=53 → 'S' | S |
| E | 69 | (69−17)=52(69 - 17) = 52(69−17)=52 → 'R' | R |
| X | 88 | (88−17)=71(88 - 17) = 71(88−17)=71 → 'G' | G |
| D | 68 | (68−17)=51(68 - 17) = 51(68−17)=51 → 'Q' | Q |
| R | 82 | (82−17)=65(82 - 17) = 65(82−17)=65 → 'A' | A |
| E | 69 | (69−17)=52(69 - 17) = 52(69−17)=52 → 'R' | R |
| X | 88 | (88−17)=71(88 - 17) = 71(88−17)=71 → 'G' | G |
| K | 75 | (75−17)=58(75 - 17) = 58(75−17)=58 → 'X' | X |
| Y | 89 | (89−17)=72(89 - 17) = 72(89−17)=72 → 'H' | H |
| R | 82 | (82−17)=65(82 - 17) = 65(82−17)=65 → 'A' | A |
| K | 75 | (75−17)=58(75 - 17) = 58(75−17)=58 → 'X' | X |
| C | 67 | (67−17)=50(67 - 17) = 50(67−17)=50 → 'P' | P |
| R | 82 | (82−17)=65(82 - 17) = 65(82−17)=65 → 'A' | A |
| U | 85 | (85−17)=68(85 - 17) = 68(85−17)=68 → 'D' | D |
| V | 86 | (86−17)=69(86 - 17) = 69(86−17)=69 → 'E' | E |

Câu 4:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ASCII (Decimal) | Binary (8-bit) | XOR với 126 | Kết quả (Binary) | Ký tự mã hóa |
| 116 | 01110100 | 01111110 | 00001010 | LF |
| 104 | 01101000 | 01111110 | 00010110 | SYN |
| 101 | 01100001 | 01111110 | 00011011 | ESC |
| 101 | 01100101 | 01111110 | 00011011 | ESC |
| 110 | 01101110 | 01111110 | 00010000 | ESC |
| 100 | 01100100 | 01111110 | 00011010 | SUB |