0;1;0;1;0;0;0;1;0;0;1;1;1;1;0;0;0;0;1;0;1;1;0;1;0;0;1;1;0;0;1;1;0;0;0;0;0;1;0;1;1;1;1;0;0;0;1;1;0;0;1;0;1;0;1;1;0;0;1;1;1;0;0;1;0;1;0;1;0;0;0;0;0;1;1;0;1;0;1;0;0;1;0;0;0;0;1;0;1;1;1;0;1;1;0;0;1;1;0;1;1;1;0;0;0;0;1;1;0;0;0;1;1;0;0;0;1;0;0;0;0;0;0;1;1;0;1;1;0;1;1;0;0;0;0;1;0;0;0;1;1;1;0;0;0;0;0;1;0;1;1;1;1;0;0;0;0;0;1;1;1;1;1;0;1;0;0;1;0;0;1;1;0;0;1;1;1;0;1;0;1;1;0;1;0;0;1;0;0;0;1;1;0;0;1;1;0;0;0;0;1;1;0;1;1;0;0;1;0;1;0;1;1;1;0;0;0;0;1;1;1;1;1;1;0;0;0;0;0;1;1;1;0;1;0;0;1;1;1;1;0;1;1;1;1;1;1;1;0;0;0;0;1;0;1;1;0;1 ;1;0;1;0;0;0;0;0;0;1;1;0;0;0;1;0;0;1;0;0;0;0;0;0;1;1;1;0;0;1;0;0000100001000011011100101001111000001011110000011000000111001000110110010101101101001011110111110011000011011111011100001101000000101010001010000101110010101001100010100010011110000101110100000101111001101010001110101110011010110011010110100100000000111001101010011100100010011010110010100000101111000001000100000011011001010111000001100100001000000011011101011100110101000000010000100101001101101110010101000001001010000100011000101110100111101010000011011011001101001111011010010000100101000001011110000010001000111000011110111001011010100011100010100100011011001010110100110111010111010111010111000001011110000011000000101011001110010101001000110110111000110000011000010110010101110000010111100001100101011110100011110000000110010101111010001011001100110101110101110011011000001010100000001010100011100000100110110000011111010001011111011100000110111101011001100010001001101011000100011111001100011000100000101101000010101000001110010000000110101010100000101010000001111110001110111001110101100001011011010000010100100000001111011110010000110110010101110000010001000111000011001010010000101111100101000111110011000001001010111000001110101110100100101011111001100000100101011100001011111100010111000011101011100011000100000010001000111000101100010100110011111011100001111110000110010111000001011000000001011110000111010100000111110101011110101001100110001100010000001001010111000001101101001011111001101011100001100100101010110000101100000101100000000111001001001000001001010000010111101111110111001110111100110101100110101101001000000001011110000010001000111000011000010010100111100100011100011000100000010001000111000010110100100110001101001000010001000111000010111001101010111011000001010100000001011110000010111101111111000011000010010100111101011001011111111001100011000100001010101010000000010001000111000010011001011000010111010110100011100000111011110010010111010010101000111000001011110111001011110000110111101011001100000101000001101010100110001101110100000010111101111001101001110010000010100111010110011110110011000001011000000001110010010010000010101001000001011110000011010011000100111000011111100000100111011100001101111011100101100000101000110010010100111011001010010101001100110001100010000011111100010110011001101011101011100110111001010110000001111000000001011110111110010101100000101101001011010000101101010100111001001010001001111000010111010000010111101011100100110001001110000010111100000100010001110000011001111011111001100101000111000001101001100010001111111010110001000111000001011110000011000000111001000110110010101100000101001011110111110001100000110000101000110000100101011100001100010001111010111110011000010111101111100011110000000011110110100101101000001110100101000011101101101000001100011000111010011110011111010010001011100101010001110010000000111111101010111011000010000001100010010000000011000100111001110111100101000001010110011110000101101000011000110110011000010110100001010100000111011100001100010101110111010111101011010010000000010111100000101111011100111011110010101110110010010011101110001110010000000110001010001101001101101110001100110000010100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101110011000011000101011000101010000010111101111010011001101001001101001011010001101001101101001111111011000101011001101011010010000001101110010101000011111011110011010011101001111000001101001100010011100000100111110000100100011100001101100101011100011100100000110110000011111111100011010100000001011110000010010100010001010101101010100110100100111110000111011100110001100010000101010101000000001101001100010011100010100100001000011000100000010111100100000001101110100100101001111110010100000110001000000100101000001101101001111111011011100110000011101111000011101101000000110110010101110001111001101000001110010001111101110010001001110000111111100100111101101100101111110000010111100010101101100101011100100001001010001101100000111101111000011001101011010010000001101100001101010010101111010010000000111010110011010000010111101111111000010111001101011010111101100100011100100000010010010100000001011110000010010100001011110111110011001101110001100000110000001110010001101100101011000001010010111101111100110000110110010101110001111001101000010101000000011011101000011011100101001111000011011101001000100110100101010011001100000100111000001110100111100111101101100001000110101100010000011000010100011001010010110011010001110111010000010000100000011111011001001111011111000110011000001010000011001010011110010100000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010001000010000001100100111111000001010001111000000101011011001010111001000000101111011110011010011100100000111100000000100101000011011101001000100110100101111110000110000010111100000100010001110000011111110101011101100001000111110011000101011111000000000110110010101110000110010100110111001011010110100000011101010000001101010100010001000001100010000010101000101000001110101100101011110100101101000001011110000110001101111101001111001000111000001110010010010000010001000111000001010100011100000100110110000011111010001011111011100011010011011011000010111010010101000111110001100000110000011100101110101000100101000011010110110000011111010101011001001100010100011001100001110101000000110101010110000101111001110011000011011001010111000011000100100001011101110010101000011000100100000010101101100101011100100001000100011100010110001101001101101001001110111000001110101100110100011110000111101100001100011011110110010001110010000000101111011100110111100101100110100101010000000111010101011100111010011010100100011010100000001010100001101001100100011101011110101100010011001100010000100000011000100100001111101001111101010110101101000000010111010111010101010010111011001001000100110001100000110000101000110000000101011000100000011101001010010000101101000000110111101000001011110000111010011001010011011001100001000111000010010010100000001110101100110100011100110100111011100101100110110010000010010100001100101011110100110000010111001100010011110011100010011010110001101000000111010100000011011011001110100101010011000110000110101100101010100110110000101111100000111101011001110101000111000001101111011111101110000111111000111001101001110111011010111011010000011110000000010111100110101000111010111001101100100011100100000101011001101111100101011010000000101111000011101010011100001100010010001100001011101011010101001101011111000110000011000111001100001100111000100010010010110100000001110101001000011010100000101000001110101001000011010100000001001010001001111001111111010110100100011001100011011000011000010001010011111010011110111000111001000000011001101001000001010100000001011110010000010011100000010011001100010110011001101011101011100110110000010101000000010001000111000001010100011100000100110110000011111010001011111011100000101111000011011111011111001100101000001100010000100111101100110101011101100000101010000011110000000011110010011000011000101001000101110100011100100000011000100100011000010010101001010000000101111000001100000011100100011011001010110000010100101111011111000110000011000010001000000110101001100011010110001000000110110010101110000010001000011111100101101000000010111101111111000010111111001100110110010000011001101010111000010101000101000101100100110110100101010101001101000001011110010000001111101001111100100010000000110000110011110000011000100100000001011010000101101011100001110101001110000011101011001010111110111000011101000010000101101001011010111000001110010010010000101010000000110010101110110001000101111100000101111000011010000110000111101001010100110011000011000101011000100100000110110000101111110011101010010010000101111110001100000101000001001010001001111011101001000101100001100110110100001101110101011101100101000001011110000101010000001111000010010010011011110000110010100100101110010101110000110100000001000010011110000100000001011110000011101101111001011001101011111000110000110101101000101010110000010101000000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100011000100000010001000111000011000101010101011100101000000110111010000110111001010011110111000001011110000111010100001110011000011001110111001011101011001101011010010000000010001000011111100110110010100100000000101111011110110010101111010110001010001001011001000001001010001011001001101101001010101010011011100110001111000011000100100001011100110110010100100000000101111100001011100101000000101010000001110111011011001010111001001110101101000000110010100100011001101001100111101011001010010101000000110110010101110000010000100111001111010111001010100001100010000100001111110100101010000011110000001110010000001100010101110010000100010000001010100000010011110010011010110010110011101010000000101111000011000100110010100111100001100010010000000101010000001001110111000011010000000101111000001101010101100001011110011100011000 ;00110001111000000001101101100111000011010000000111100100001000011110110111110010100100000000100010001110000011111110101011101100001000111110001100000110001110111010111010000011110111110000110000010000100111001111010111001010110000000101010000000110010101011101001001111100001001000001100010000010101000101000001000101000111010100000101111001000000101110100110110101101011101000000010111100001010100000001011101001101110010010010011100110000110110010101110001110011000011011011111011100101101111100101001000000011000100001101010000011100100000011010100100100010111101001101010000000101111011101100010101100101001110100110111011111000010110100000001011110000010001000111000110000100101000101110000001000111000001011110000110101010011010111010111111001001011010011011100011000001100101011111000010111011001010010000000101010001010000011111110101011101100010100011110000000101010000001110011000011010111001111001101010000000101111000001001010001010010000101111101000111000110110000111010111010010010110010100100000011100100000011001010101110100100111110000100100000101000001001010001111000010111001101001011010000010111100000100101000011001011001001110101110001100000110000001110010111011011000010111110001110010000000111010100111110100000001011110000110011011000011000100000100111110100100111011111001100000100101000001111111110000101111100001111110001010111010000110110111001010100010100100000011001010101110100100111110000100100000110001000000111101111100000101000101000001001010000011111110101011101100010100010100100000101001000110010110000110011100000101111000011101010000001101101100001001100011000001100001010001100001001010000110011011111000011001101101000011011110100011100100110100110111011000101001010100000001001010111000001011101011101011101100001100110110101110011000001011100110000011101001111001111101001000101110010101000001100000011100100011011001010110000010100101111011111000110000011000010100110101100111110000101110010100000001011110000011100100011000100110011000111001000000110111010000110111001010011110000011100100001011001001100010000001111011110010000010001000000110110010101110000100011000101010011001111000111100000001100010101010010001101100101011011111001000001000101000111111011001000001011110000010010100001011110111110011001101110011000011111011000000001101010000111101111001011111100000101111000011101010000011001010111101110001100110000010100000110000010000100000000110111100101110101000010111000001010001011001001011101111100001011111000011011111010110011011111001010010000000101010001010001010111010000110111001010010100011110100000101111001101010001110101110011010110011010110100100000001100010010000000010010100000100010100011101010000011111110100111111011000010111110111011001010110101100010000011100101001111101111100101001000000010101000000001101010010000101101101001000000001011110000110111110111110011100101010000111111011001010001111000000001101110101011101001010000010111100000100101000011001010010000100111000110001000000100111000001110100111110000010111011111001010010000000011001101010111001111101000000011011110010111011011000010111110000010010100001100010010000110011110000101110011010110011010110100100000000101111000001000100011100010011011100010010001110000111010000100101100111101111100011000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001011100110000110110010101110001010110101001100000010000100000101011001011100101011100101010000010111100001100010010000111010000100101100101111110000011100100100100011100100000001100111001101011001010111010000000101111000011101010011100011010011011011000111011111001100001100010010000110011011100101101011010000000100101000110100101111101000001011110000101001011110100100110111000011101100100010101101100101011100100000110110000011110111100001011010000001100010000110101000000101010000001011001001101101000001011110000011111010101111001100110111000110000011000000111001000110110010101100000101001011110111110011000010001011100110100000111101111100001111001100001011100110101011011010000000101111000001011101011101010101001011101100100100010011000110000011001010011110010100000010111111001001101110110000110100000001110010010010001010110011100111001011101100100000100010001110000010101000111000001001101100000111110100010111110111000110100110110110000101110100101010001110001100010000010111001111011100000111011011111100001110101110000010111100000101110110001111001010000001100010000100010010001101101001000001010000110010100110111001011010100000001011110000010010100000100010100011101011100011000001100000111001011101010001001010000010000100010010010110100000001011110000110001001000011101011111100110001010110011010110100100011000110000110101010110110010101110010000000101110110001111001010000000110011010010010011011011100101010000011101011001010111110000010111100001010100000001100010000110011100111100000101111000001101010010001110010110101110000010111100001001001010000001101100101011100001110101000000111010100101100111100001101111011100101100000101000101011000101000110101010001001010010101000001111000000010110100001011010000101010001010000011110110100101101000001011110000011101001110100111101010110011010100100011101111100110001100010000011011001010111000111001000010010100001101111011100101100000101000111100001011111100110011010010101000000010111111001010111000010010000000101111000001001010000110010100110110100011110000001110111001110111100110100000101111000010101000101000110010010101111000101000010001100101011111010110100100000000111010110011010001101100000111101111001010111101100111000001010111110001100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000100001000000101110011010101101101000000111110101101100101011011111001101000001011110000110001001000011101000010010110010010010111001100011110000101110011110011111101001010100000001110010010010001111000010111111001010000010100001110101001110001110011000011001110111100111010011011111000010110100011100001011001100010011000101111010110001000111000011000100100000000100101000101110010100011100111111010110011010110100100000000101111000010101000000011001101111100001011110000000110011110101100010000011000100001010101010000001010001001110111101110011111010000000101111000011101010000001110100101000011101101101000001111011010010110111000110000110101100001001101010111011000001010100000001011110000010111100110101000111010111001101100100000100010001110001110011001111101100010110100011100000101111000001001010000010001010001110101000111100000000100101000010111001010000111010100011110001110011011101001111110111001100001111110001110011000011001110010100111010000000110010000100000001101110101110011010100000101000001001010000110001001000011001111000010111001101011001101011010010000000010111100000100010001110001001101110001001000111000011101000010010110011110111000110001000001110101000110011100111010110100000011011001010111001101101001010101010011010111000011011001010111000011111100001100010010000011110110110010101111011111001010010000001111000000011010100100100011001111001101011100011000100000101110110010010110110010100100000000110101010011000110111010000001011110111100110100111001000001111000000011110110001011001110001100001101010110000101111100000100101011100000111010010100010111110111010111010111000001011110000111010100000011010101011000010111100111001100010100100101100100110110100101101000001110010010010000101110110000000011101110010011010011111100101000111101000110110000011110111100001011110100111101011100110001110111010110101000111100100000101000001110010101000010110100000001011110001101100001100111100000101110110110010000010010100001100101011110111000110000011001010010101111011100101010000010010110010011111101011100001101110100100110101110001111000000011101010000011000101010110010101101001100110000110111101011001101111100000101010000001100001100010001000110001010001000100011100001110100110010100111100000100101011100000111001000111110111001011010010011010010110100101111011100011101110101110011010101100110010000111111101011001010111000001011110000111010100001011001001101101000100001000011110111001010100011110111001100001101111010111010111010000110110010101110000010001000011111100101101000000110001000011010011100100100011110010000101010000000011011011000010101010010000000101111000010101000101000101011101000011011100101001010001111010000110000100101100111010010110100101000001011101001010011000100110001011110101100101000110001000001010100000000111001000010111110010000010111100001100010010000011110110101100011001101011010010000001101100110011110111110101110101111011100100010011111000110000011000010001000001111000001111011010110100000101000001001010111000101010100101101001001110100101101001011110111000101011000100001101001110101011010111101001010100000001011110001000010100011011111001010001110100011100001011111011101011110100110101001000110101000111000011101001100101001111000011101010011100011100110000110011101111001110111110000110011011010111000110001000000101111000001111010110011101010001110000011100010011011110011111010001110000010111100000101110111001001010110000100100011100011100110000110011100010011010110010101011110100111100100011111001100010100100000011000101011010010110100101010000000101111000010101000000001101111100001111011100001011110010100000011011001010111000101010111001101001111011101110110100000001001010000111110111110011001101110011000110001000001111110001110011000011010111001101001111011010110100000111100000000111010110000101110110000100011100000101111011100110111101110101010011010010101000111110011000100111100110101001000010110110100000100111000000100011100001011010010010011011111000010110100011101000111000110001000011101110101101010001111001000001010000011100101010000101101000000010111100000111011110011110110011110010001100101011100001001000001110010000010111000011010001011111000001011110000010010101110000011001111011111001101011111001100000100101000001011110111111011100111011110011010110011010110100100000011000100000010010100000111011101110101111111001100010110000101111101110000010111100001100010010000111111001111101010110110010000101010001010001001010100101110100000101111000111100000100101011001110000110001001000000001001010111000001101010100010010101110000010111100100000011000100100110011110100110001100001101010100000111011101111011001000001011110000110110010101110001110010000000111101101101110000101110001010000010010100001100101001110110101011101001000001111001101000111100000010101101100101011100100000010111101111001101001110010000000111001000110001000000011011111000010001110000110110010101110001101001101001110010001111101110010001001111100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110110100000111010010100001101111010111100000101000110110000101111110000101110110010010001000000101110110000000011101001010010000101101000000110001000011010100000011111100000100010000001001001001011111000101100110100011100100000001111101001100101101111100110000100110011000011000100100000011100100000001100111101100000000101111000011011110101100111100100000101111001101010001110101110011010110011010100100011101110000011101001001100010011000101111010110010101110000010111100001110101000011011000001111011110000101101000001011000010111110000010001000111000001110010000101111100111101110000011011101001001101010111011001111011111001100011000100001010010111011110111010111001101100100100010001110000011101111001011101001000101001000011011111000010111110001111000000001001010111000011000100001101001110001001101011001010010110101110001011001010111110111000001011110000010010100000111110101011110011001101000011101000010010110011100011000011010110010101010011011000010111110000011110101100111010100011100010101101011101000111000111011100111011110010110100000001001010001001111011100111001010111011101011101110001100000110010100010010010000110101001001000101111010011010100110011000011001011000011110100101010000000101111000111011100111011110011011001110011000011111100000100101001101111100001011011010000010110000101111100000110000001110010001101100101011000001010010111101110000010111100100000001100111001101011001010111010000000101111000011101010000110110001101011001101101010111101001111010111001100011000100001110010000000111111101010111011000010000000101110101000001111000010110100100001100111011100001010100010100000111010010101011111001010100001100010010000011110110110000110011110000101111100000101111000011011101001000100110100101111110000110110101100010000010011100000101111001111001000010000111101101011010000000100010001110000010101001100100010001001000111011100010100001100101001101110010110101000000010111100000100101000001000101000111010111001100011000100000010011100000101111110000100110100000101001011110011010011000100111000010101000010001110000011011010011101010111000001110010010010101101010001111101010111011111101110001100010000001111010110011101010001110001101100001110101110010101000110111110000101101000111000001011110001000101001111011100111111010110011010110100100011000110000110101100111100001110101000000111001010011010111010000011000100000010011101011100110100011101110110010011101110010110101101000000101010001010001010011101001111010111010010110100001111100000100001011111011111010111000001011110000010001000111000111011101011010100010111010100011100000101111001000000011010100100011000010111000001100001011111110010011011011000100011001100001101100101011100000101111110000100110100000101000011101010000001011101011100111001000111110101100110101101001000000001110101100110100001101100101011100000111001010001011101111100110100001111111001001111011011001011111100000101111001000001010111010111001010000100101110010110101001100110000010010100011001010010110101001110000100101000100101000110001000011100100000011111100110000110101110110000101111111000110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100000111010101110110100000001000100011100000100101100100111110100011100000110111101111110111000001011110000010000100010100011110110110100011110000110011110011001101001010100000111100000001010100000001100010101011001010111101010110100000011011001010111000011000100100001110101110010101011000100110100000111100000011100100000001100110100100000101010000000101111000001001010000110010101111010000011101011001101000011011001010111000100010100101110111100000111011110010101101010100111001010110011010000111010100111000111001100001100111011110011101001101111100001011010001111100011000001100001011110111001011011111000001010100000101110010101100000101010010001010010101000000011100100100100001100010000110100111000100111010110100000001001010111000010011001000100110100111111010110011010100100011101110000010101000011010011001000111010111101011001010111110011000001110111100100110110110001110110011010110100000100001000110001101111110111000111100001011111100110101110001111000000111001000000011101010101111010100000001111011010011111110100100101100000101010000011100100000011000101010010111010000000101111000001000100011100010101110101110010100011111001100011000100001110111010110101000111100100000101000001110010101000010110100000001011110000110001001000010111001101111100100001010100010100011011000011101000010010101100110101101001000000001110010010010000101110011010101110110010000010111100011101110101110111001000100111011001111001000010101000000001101001100100010110100001010100000111001100001110101100010110100000001110101100110100011110000110001001000010111001101100100011100100000001101111001011101010000101110000010111000110000110101101000101010110000010101000000111111000011011111011100001101000001110011000011001110111100101011010000011110000001110010000001010011101000001100010000001101101100011111000010010000000101111000011101010011100011011000011101011100101010001101111100001011010001111100110000101101010001111001000000101010001010001000010001100110101101001000000001011110010000011101110011101010110011010100000011011001010111000001001110000011101111001001101110101011110101101000001000101001111011100111111011001000001110010010010000011011011001111011100011011000011000110100001111110001101010110100011111001100000111101101011111010101110110010000101111110011001110101011010010011101010001110000010111101110110111101110010110101011101001010100011100011000100000101110011011100101011001000100111100100101011001101011010010000000110001001000000011111110011110111000111011100111000100001100100100000101110100101010001111100110000111110110000001000111011001110111110100101101001010000010111100010111001010110000010101001000101100100001110101000000111111011100101101100011101011111110001100000110000101100101011100000110010001111010000010010100000110010000111001000110010100011110000000110110010101110001010010101101100101011011001110101101000001110010000001101110011000101100101101010110100000001011110000110111101110010001001011001000101000011101000010010101111100110000011101010111111001100010100000101010001111110000011100100100100000100101000011001010111101000011111011000000011011110101100111100100001100101011101000000010111100010001010010111011111100110000011011101111100001011100110101110000011000001110010111010100010010100011000100000010001000111000100011010110101110100011100001111110000011101011001010111100000101100000011100100000111011100111011011000101110000110100000111100000000100101000011011101010111100101011101000011000101011010010110110000010101000001110010000000111000100001100010010111011000010000011000100000010010100000110110100100101100000111111011100110000010010100011000100101001100101000110001000011100100000011010111101001101111110011000001001010001010110111010101100010101001101101000110001000000100101000110010111100111110001100001011110001011100011000011010110011110000011101001010010000101101001100110000111110110000001000110110000011111011010100110000001011000010101000011001101010011001100001110101000010101100010111101001111011010010110100101000001100111111100101001110100100000011111100011011000010111111001100101010001101001110110101101000001100010000001100110101011100001110101001110101111010101101010110100101101000001110010010010000101010001010001110111001110111011001101111000001011110000011001110101110110011011000101011001101011010010001100011000001100011101110101101010001111001000000011110101100111010100011100000101110000010101110000110001000011010100000011011111101100011011111011100001110100101010011001100010011110011101101010111101001100100100000101010001111110001010000111110000000000110111010111001101010000011110000000011110010011000011000110010101110000101010000101010000000111101100101011101001000000010111100010101110100001101110010100101000111101011100001100010010001100001011101011010101001101011111001100001111101100000000101101100100001100100100110010000101110101011010000010100001110101000000111010010100001110110101000001111000010111111000001011101001101110111110000101101001100011000001100101000100100100000110011110110001100110000101010000000011011011001010111110111000001011110000010111010110011011110011011100101001111110011000101000001001010000110111010010011010000010111100100000101001000011010101011110011100001101001100110000111010000100010110110100000001011110000101010000000011111010000100001110111000010110100001011010000010010100001100101100100111111010000010111100001110101000001011010010010011011111000010110100110001100000110000100010001110001000110101101011101000111000011011110111001011000001011000000001011110001001111011000100100100101101100100000111001001001000111001000001001111011101011010000000101111000011101010000001111011010010110100000100101000101010100011111010100111010111010000111010000100111001101100011010010110100101000011000100100000001101100101011100001110101000000111010100101100111100001111110000111111100001011011010000010100000100101000011001011100101110110011110011010000010111100000100101000001101111011110111001100001011111001101110010001001011000001010100000001011110000011001111011111100101001111110011000001011110011110101011101011101001010100000001110010010010000010010100000111010010100001000100100000111111010010110100000111101101001111111010010011011010001100010000001110010010010001110010000011110000110001001000010000000101111000011101010000110100110110100111111101100010101100110101101001000110011000110001000000100111011100010011110011110111001000110100000011101010000001011110111011000101011001010011101001101110111110000101101001100011000 ;00110001100011000010010100001011110111110011001101000111011100010011110010101001000001011010000110001000011010100000010101000101000100010110011011000110000101011100011000 ;00110000011100101110101000100101000001110111100100101110101101000000010010100000111010101100110111110000110011011011100011000001100001010001100101011101000011011110101110000010111100000111100100001000011110111100101011111000001000100011000100110011000001111001010001100100001000011110111010111110000101101101010010000111010000100010000000110001100011111100111010101101101000011000110110001100000110010100111100101000001000010000001011100110101011111011100000101111000110110000110001010001000110010110010001010000010001000111000100011010110101110100011100001011010100111000110100101111101011100000101111000001111111010101110110000100110001100110000010100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101110011000110100110100111010101111101110010001001111100110001000010000001111110000010111111000010011010000010100110111100101100111110000101110110010000011100100100100000100101000001011110111111011100111011110011010110011010110100100000000101111000011101010000001101010101100001011110011100110000110110010101110001111000000010101000000100110100111001011010000000101111000011000110100001001111001101000001001110000010111101110101110010100110000110110100000111001000001010111010111001010000100101110010110101000000110001001000010111001101000111001000000111010101110010001001100011000011010110100010010000111010111001010101100010011010000001000101110010100110011000100111101010100011010110100000111100000011100100000011000101010110010101111010101101000001010000010001000111000011011101000011011100101001111011100000101111001000000011100101011111001000100010000011000100000010011101110000010111100110101000111010111001011010011001100001100010010000000101111101001001110000010101110000110110010101110000011101011001101000010110100001010100011100010011110111010100010001011101110010101100000011011000011000100001101001110100111110000111110111001000100111011111001100000100101000001110010001111101110010110100100110100101101001010000010111100010011110011111100111101111011001000101001000000011100101010000101101000000010111100000111010110010101111010010110100010001010011110111001111110110000010101000000111110111100110100111010011110000110111101011001101101000111001000000011000001001110011101111100001011111110001100001101011000001000010110100000100101000101001000010111110100011101110101110111001010100001100010010000011110111100001100110100101101000001011110000110110010101110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100001101111011100101100000101000001110111100100101110100101010000011100100000110000100101011010110011010100110011000011000101010110000010101000000010000100111001111101101000000011000000111001000110110010101100000101001011110111000101000001110010010001111001000001001010111000011000100011110101110001111000000011101010000001110010101000010110100110001100000110001110011000011101001000101101101000001111000000001110011010100111001000100110101100010000000100101000110110000101111100100110100111111111000011001101101000001011110001010110110010101110010000001101110100001101110010100111100001101100101011100000111001001001000001110010101001101000111011100111011101100010100010010101100110101101001000000101011101011100101001000011010000110111010110010100001101111011100101100000101000011000100100001110101110010101011010010101000000101010001010000101111101001001110000010100011000101010000110001000011010011101001010011001010100101101000111100000000100101000001110100100110001001100010111101011001011100110001010101010000110110010101110000010111101110110001001000010001100110100101101000011011110101110101110100011110000101101001000011001110111000111100000000110000001010110001001000001010100110011000110001000001100010000110101000000101010001010000011101001010101111100101010000010111100001110101000010100101001101110110011010110011010110100100000000100111000011011111011100001101000000101010000001001111001111110100100010000001101100101011100001101111011100101100000101000001011110001111100001011110010110011110010000101010001010001101100000110011001000101011110000110011011010000101111110010011011101100010110000101111100011110000001110010000000110011010100101101010100101000000010111100000100101000101001000010111110101101011000100001010100000000100101110010010010011010101101001001110101000000010111100010100100011011001010110100110111011011100011000 ;00110010100101100110100011101111010000011001000011100100011001011100110000011000000111001000110110010101100000101001011110111000011011110111001011000001010001111000001111011111000010111011001101001010100000011000100100000001010100010100010011010011101101001011111100001100010101110100001101110010100101000111101110001100000110001111000000011101010011100000111010011101001101111100101000111000001111011011011100001011101110000011101011001111011001100000101000010111111000111100100000100101000001101110101110011011010001110010110100101000001011110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110110111000110000011001010011110010100000001101110111110000101110011010111000001100100011101011111000011000100100001111111001001111010111001010100001110101000000110011010101111001110000111010000010111101110110001000011010101010001010010011001100001101100101011100000100111000001110111100100110111010101111000001010000010111110011001110111001010110010000101010000000110010111001010100100001000100000101001111110110011001001100010100000101010000100010000000111001001001000001001010111000010010011111100001010101111100110001110010000000111111101010111011000010000000111010110011110110011000001010001110111010111001101001111110100101010000000111001001001000010101000101000001010100001001111000011001101101000010111111000101110000111100011000001100011110011011100110001111000000100111110100100110100101101001011100110001110010000010011110111010100010001011101001010100000001011110000011010110101001001000101111010011100010011101110001100010000100110110011010111000111100000110011111100100110111100101101001011110111000011000100100001011100110111000000010110101110001111000000011101010011100011011000011000100100001011101110010001001110111000001111011011011100001011101110001010010010011110010111100101010010010000010111100100000001101010101000001010100110001100000110010101111001111101101010011000000001100100001000000011011101011100110101000000010011100001100010010000101101101000001010000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110110100000110111011111000010111001101011100000100010000010111000100101000101101110010101000101000001101010010000101110110010001110010000000100101110010010010011010101101001001110101001100110000010010100000110101010111100101011111000001000100000011111100111110101011000001010001010000101101000010110101110000011101011001010111110111110011000011011101010011100110111100110001010000010101000010011100000100010001110000011101011000010111010010001001000111011111001100000111011110010100000011111011000000001011110110011010010111011001011111100010100000101101100100100111000111001000001100001110110010011101011100001101000000011001111011000101001001100011000001100011110011010000101010000000011001101010001111111010101111010011110010000000101111000011000101010110000101110101110000011100010010100111111010111000110001000001100101010110011000100111010111001010000110011111011100001101111011100101100000101100000000110011001001010011111111001001010010101000001010010000000111110011001001000111100101000000110111010100011011011000010011000110000011001010101001100101001111001111011010011110110101101000001010000010010100000111011100100101001111110011010001111000000001100101001111001011111011011100110001010010000011101110110001001001110010010100101101000001111000000111001000001011001011000110111110100111011010011001000010010100111110100000001011110000011000000101001001010111110110111001100010100000100101000001001110011101001101000111100000001101010100100111110000101011000001011001110000010111001100010100100000110010111100111011100101111001110100011110000001110010000000110010111010011100110100100011001100010100000100101000001110111011101011111000110010010101100100110100100011010110010100011110000000011000000101001011010011111101011101100101100111001100010100100000010111111001100111100110101000101101000000010111100000110010101110101100110100100110110100011000100001010000101010000001000101010100011001110011010011111110101000000011010101000100010111101010110101000101110110001011001110101000001111000000111001000001110111010111001111011000110111010000000101111000001100000010100111111010010000100101100011101111100011000011010101011011001010111001000000111111100100000111010010100001011101001111111010100011101000000110110010101110000010111101100110000010100000111001000111111111100100000100101011100001100001001010011110111011100000101111000011010110101010001110101110011010010110100110101010011111001100011110011010000101010000000110111010000110111001010011110000010001101010010011111010101100101001111110011000111100000111100101011100100010110100000111100000001010100000010101010100110100001011100111010111010111111100110000110001001000000010101000101000001101110110011010010110100010101111101001100010010111101011001010000110110010101110000011101011001111011001100000101000011000100100001000110011110010001110010000001000101110010100000001001010010101000000010111100000100101011100001100010001111010111110001100000110000010000011110111001010100001010100000001110100001101110010100111110010100000001111110011011000001011110001100010000100011100111111001010011001100001100010000110101000000010010101110001010010010101110001110011000011010111111000001011101001011010111000001011110000101010000000110001010111100100111100100110011000110001000001010100000001100011011110100100111011000100000001011110000101111110010110011010100001110111001000100000001110101010111101100010100101010000000111001001001000111001000000011110111100100101110000010000000010111100000100010001110000111110100111110010001000111110001100000110010100111100101000001010000011101110111101100100000101111000011101010000110110000011011111000011110100001111011100101101001010101010011100000101000110001000000101111000011101010000001100010001101110010110101011010000000110111010111010111111001110101000111010011001100001011111100011000001010000101010000000011101110111010000001101110101000110110110000100110011000010101000101000011000100100000101110101100110101101001000000010111111001100111101110101110011110000110110010101110000010001000000011011011000010111111000110000010100011110001001111001011010010101000001111000000001000100011100000110111011000011010100101110110001010001000100011100000111010010100110010001001110011011010111000001011110000010010100000111101101001011010000110001000101111010010111011011000101110001100000110010101111000011011001010111110000101011100101010000010111100000101010000100111100001100110110101110000010111100000111101101111110000100100110011000011101010001100111001110000010100000111001001001000001000100011100000110100110001001110001101100001111101001111110001101001100111101011001011000010111110111000001110111100101100101100001100111011100011101100010010000110100001101110101100010001110001100010000011011110111001011000001010000010111111000010101001010100000001011110001001111110000010010000010111101110010111100001101111010110011000001010000011010101001100011011101000000101111011110011010011100100110011000001110010010010110110010101110001110010000011101110110001001001110010010100101101000000010011100001101111011100101100000101000101100110011011000011001010010101000000010001000111000001011101111100001011111011111000110000011000111001000000111010000110011010001100101100001011111000001101111001011101010000101110000010100011110000000110110010101110001001111001111011100100011010000001110101001110000111111011001001111010110100011111001100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000010110101000111100100000001001010000110011110010101111010010101010001101110010100111100000101111000011011001010111000101011011001010001100100001000001111001101000111001000000011101001110110000110011010011101101010000000101111000010101000101000001111110011011000001011110001010011011101011101011101001011100011000001100001000100011100010001101011010111010001110000111111000101011101000011011100101001101100101001000000011000100100000001110101001110001001111001001010101101000111000001100111011000010110011000100111010111101011000100011111000110000110101010101010011110010011011011000010011001100001101100101011100010000100000010111111000110000010100011110000101101001000011001110111000001101001100010011100000101111000011001101100001100010000010101101011101000111110011000011011110111001011000001010000010111100010011110110001001001001011011001001000100000001110010010010001110010000010011110111010110100000001011110000111010100000011110110100101101000011000100001101010000000100010000000111101101010000010101101100101011100100001001010000101110110010010111111001100001111111000010111010010101000000110001001000010111001101000001001010000110000100101100111010010110100101000001101111010110011000100010011010110010100011000100001001111001111011110011100101111001101100001011111000001011110000010010100000111101111000010111011000101110011000101001000101000110111001010011011000001010100000011000100100000001110101000000111010010100001100011000000110011010101000001011010000011110010011000011000001011110000110100100100111111011000010000000100010001110000101111110011001110101011010010011101010001110000011010011000100111000010001110110001010100101000111000001011110000010010100011010011011010011111110110001010110011010110100100011001100000110111011111000010111001101011100001100011011101001001100111110111001010100000111001001001000011101010011100001111101111100011101110000010010100000111111001101011110100000101111100110011110101111010010110100000111001001001000111001000000110010100100010010011100011000001100101101000111001100100000011010101100101100101001011101010011001100001110101000001101111111001001101101100001000000011011011100010010010011100110000110111101110010110000010100000101111000010111001101100001110011011101010111101100100010101101100101011100100001001010001101001101101001111111110000000011011011001101001111011010010000100010001111011100110000110001000011010100000010101000000100111101100010101111001001010100000011011111110011110010111010101110110011101010011001100010100001011010000101101000011101010000001011110111011001111000001011111000011001101101110001100000110000011100101110101000100101110011000111100000001100101001101110010110101001100110000110001001000011111110010011110011010000001010100000000110110100100000100111101100010101111001001010100000001011110001010110110010101110010000100101000001111011010111110101011101110011000001110010010010110110010101110001111000010111001011010000010100100000011000101010110010101101000001111000000111001000000011010100001101111100001011010000011110000000110110010101110000011000000111001000110110010101100000101001011110111000100101000011010011101101011010000000111001001001000001011101011101011100110101100011001101011010010000000101010000000011001110011010111011000100000001011110001100101101011000010001001001010101001010000000101111000001101111100101100010101001110101001100011000 ;00110001100011000111011100011100100000010000100010010010000010111100100000001011110011010100100011010100000001100011000101110111000010010000011100100001001011100011000 ;00110001100011000111100000010111001001110100001000101001011010000000110001100110001001001100111010011111110101101000000011000000111001000110110010101100000101001011110111001100011011000110000011000111011101011001100010000011000100001101001110100101001100101010010101000000110110010101110001110010000000101111001101010010001101010000001011110111110001110000011101001010000111011011110010110100101111011100001110101000100001100110110101001100111010110010101111100110001100010000111011101011010000010000100000111011100000110100110001001110000110110010101110000101010000000011100100011000100000001011110000111010000100110100110100110001010001100011000 ;001100101011101111001101001110100111100000101110100101001100010011000101111010110001001100110000110111110111000011010000001010100010100001111011100101101101000111001100001100111001000111110101100110101101001000000011101001100101001111000001001010111000001111011011001010110101000101111011100000101110110111001001101000010011010110010101110000010111100100000011001101100010111001010011101010011001100000111011110010100000001100000111001011101010001001010001000010000000100111000011011111011100001101000000110010101110100110011000011111011000010000001101100101011100001111110000010000100111001111001101000000010001000111000100011010110101110100011100010100010011111100001110110011100011000011010101011011001010111001000000100001000100100100000110101001001001011101111100001011111000011011001010111001011011001110000010100000111010110011010000111110111100110100111010011110001111000000011101010000001101111001101010010011101101110011000001111011011000011000101000100101001010100000101001000001001111011000101011110010010101000000010111100000110000001110010001101100101011000001010010111101111100011000 ;001100011100100000100101010001011101001101111100001011101100111010100000001001011100100100100110101011010010011101010000000110001100111110110000000110001001000010111011001000010101000101000001110100101000011001101010011111010110100100000000101111000011001011100001101010111001001010111110011000111001101110010010100010101000111110011000100111101011010010010101110101111100110000011001111010010001011100101000111000110001000001100010000100101001010100100111101110011000110000111011101011101110010101000011000100001101001110010101110111010110100000001110010010010000101010000001010101110110000100100100000111010011101001101110101011110100111100100001100000100010000101010001010000011101001010011001011101011101000001011110000110010011101011101011101001000000010111100001100010101110010000100010000000100101100100111110100000110001000010110000011111010001110101101001100110001101001101110101011101011001101011010010000000010111100100000011011101010111001111001000000011001111010010001000111011010000110011110101100010011001100011000100000101010000000010111101110101111010010010100101010010010000110001001000011101011100101010110100101010000000111001001001000001000100011100000111010010100001110110101000111000001111111010101110110000100011100001111110011111011010100110000000010010101110000010111101110110010011101001110011001101010010001110111000001101010000101111100110001010111000001011110010000010100100101001101110010110101101100101011100000101111000010111001111011100011001010011011100001101000111000001011110000011000000101100111000001010000010010100011000010010100010111000001011100011000011010101001011110011010011000100111000001011110001110111010111010111000011000100011110101111100110000011000000111001000110110010101100000101001011110111000001011111100001001101000000011010101011101110101110011010111000001011110000010001000111000011111011110101111100000110111101011101001001110111000011000100100110011110111001110010010000010111011111000010111110111000101000001000100011100001111101111010111110000011100010010110001110101110101111100110000010010101110000011001101101001001001101010100010010101110000010111100000110000000100110101110011001000111000110001000001101011011101001101000111110100110101000000011101011001101000111001000000010101001100100010010100101010000000101111001000000100100101001100110001100010000010101000101000011111110011101111000001011110001010011100101010000101111101110001100010000001011101110010010101100001001000111000011101001100101001111000001000100011100000111010010100011001110111010001110000010111100100000011010110110011001101100000000110000001010011111110101110101111110011101010011001100001101100101011100000111011110010011011101010111100000101100000010100001101100101011011111000000011101010001110110111110011010001101100001011111100100111010011110101110110010010001000111000110110000101111110000101110110010000010010100000110011101110010100111010110010101100110101101001000000001011110000010010100000111011011110010110011010000011001111010010001000111010000110011101001001100011000001100101011110010101010011001101001010100000001110010010010000010010100001111101001101001110001001101011001101001011010010100000101111000001001010111000001100110110100100100110101010001001010111000001110101100110100000101010011001000100101100100011100100000010010010100110011000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010000110001001001010111111100001001101000001010000011000001110010111010100010010100000101010101001101100001011111000001111010110011101101011100001111110011011011000101011111001100000111010110011010000110110010101110000010011100000111011110010011011101010111101111100110100000101111011111110000101111110011001101100100001110101001110000011010100100011100101101011100001100010000100010010001101101001001110111000110001000010101010001101111100001011101100100100101011100001011101100001011101011100000111101110110011101110000110001000011010100000111100110100000111001000111110111001000100111000011101010110010001011101001111011010010111011001000111001000001011100001101000011111110100100111110001100000110000011100101110101000100101000011001110010111010110100110011000011000100001101010000001000110001010100110011100000101000011111011110011010011101001111110011000101100001011111000001001010001101100001101100101011111001010011011000010111011100100010011100001001100100111010111101100010101100110101101001000000001011110000111010100000011011011001110100101010011000110000011000111100001011010010000110011101110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100011101100011011101101000000101110011111101100001011101000001010100110010001000100100011101110001111000000010101000101000011001011100001101010111001001011100110001100010000001000100011100000110011010101000001011101011010000001100010010000001001101011100111010100101010101001101000001011110000110001001100101001111110011000010010010100001110110100110111110000101111111001100010111000011010100011001110011110001100010000001110001000100001101010011000110000011001010001010011101000001010000110111111100100111101101100100001011010000101010000010100000110011010101110011111010000000111101101001111001000001111000000010101000000011001010010000101111100101000000010111100010101100111110101011111000001011110001001110101100110110000100000011011110101110101110100001001100100101111110001111001000010101000000110000101011001101110010111000111011100111011101110100000110001000000111011101110101111010010011110000101111100000110100110001001110000011101011001111011001101001010100000101001000000110010110011010011011110010001000000011110010100010000111111011001000011011001010111000101001000000100100101000000011011010011111100011000000011001111010110001001100011000001100011110000001011100001110110010100011101000111000110001000000101111011111101110011101111001101001010100011100000111010010100011001110111010001110000010111100000101111011101011110100100101011001101011010010001100110000011001101010100000101110100101101000011000100100000000100010001110000111110111101011111000001101111010111010010011101110000011100010010110001110101110110011101010001111100110000101110011011100101011100001010100101101000011000100100000011100100000001101111100101100010101001110101000000110111111100100110100110010001011110101100010000011000100001110010000000111101101010111001110101000010001000000010111100001101011010001101111101001110100111111001100011000100000011110010101110010001011101000101000011000100011001111001000111100000000110110110000101111101100101000001011110000110011110010010101000001010000011001110100100010111010000010111100010101100111110101011111000001011110001001001100010110010101100001001100110000010010100000111010011110110011010100011110100001101111111001111100001100110110100000101111000001100000111001011101010001001010000110110010101110010101101000001001111001010101001100110100101101000101000010101000000011000110111110101100011011110110011001011010010000000110010110011100100100100011011100001110100101010000001101100101011100010000100000001110010100010101000000111111100100000101111011100111010011111000001011101001010100000001011110010000000110011010010000010101000000010111100100000011001010010000101111100101001100011000 ;011010110100010101011000001010100000001111001000010000111101101111100101001000000001000100011100000111111101010111011000010001111100110000011000001110010111010100010010100001101111011100101100000101000001110100111100101110101110011100101011101110101101000000110001001000010111001101000111001000010001000111000101000010110100001011010000010010100000111001001100100010010101100110101101001000110001100000110010100111100101000000010010100001100010101001110101000111110100101101001010000011100101000101010000000110100110001001110000110110010101110001110010000001011111001101010010011100110000011100100100101101100101011100010101101100101011100100001001010000011110111110000110000010001000111000001111111010101110110000100011100010011110110001001001100111011111001010010000000010010100010100100001011111010000110111101011001101111100000101010000001010100000010010101011010010101000001111000011101001001001011110110011100101010010010000110001001000000010110100001011010000110000100101011111100000101111000110110000111010111001010100011011111000010110100011100000110101101010010111110101100010001111100110000011011101111100001011100110101110001110010000000111010011110011111010010001111001010000010110000101010000110011011011100101010000010010100011100110000110110111110111001011010110011010110100100000000101111001000000011010011000100111000001100111011100100101000100010001110100000011011110100100001001011100001100111110100000001011110000010001000111000100010101110110011011011000011001111000010001111100011000011010110011110000011010100001010100000011011001010111000010110100001010100000111001000000011010101010000010101000000111111000001100110101011100010100000100101000011001011001001110101110011000110001000000110111100101110110110000101111100011100100000001110101001111101000000010111100001010100000001100111100001011101001111001000000011110110111110010100100000001010100000000110000001110010001101100101011000001010010111101110001100001001010001111011110001101001001100110001001111001110010101110111010110100110011000001011110111101100110010101000111111010010101001100110000110001001000000010101000101000001011111000010111010010101010100110100010000101011100111101010001100010000100110100101110110110000101111111000110000110101101101101010110111110001110111000100111101100010010010010110111001010110000000111010100111000111100001100110000010101110000010111101110101110010101011010010110101110000011100100100100011100100000111011101100010010011100100101001011010011001100001110101001110000011011111100001011010010000100101011100000110011001000011000100110001100110100101101011100011000100000111010100111000001001011100101101010001110000011011011001011000110111110101011010001111100110000111111000111011101011100111100110111101100110111110010100100000000101111000001110101001111001001001000101100001011111000101011011001010111001000010010100000111010010101011111001010100001011111100100110111011000101100001011111000001011110000010001000111000001110010000101111100111101110000111010011001010011111000101010110101010011010010011101110000010111100100000001111111010101110110000100110001100000110001110010000000111010100111100100100100001111110000110001001000001111011011001010111101011010000011110000000011100011000101000110101100010000001100010101011000001010100000001100000011100100011011001010110000010100101111011100001111110000111101011000110100000001000100011100000101110111110000101111101111100110001101100001011101011000101101000111110011000111100000111111010111010111010010101000111000111100000000100101011100011110000110011000001010111110011000110001000001111110000010001000111000001101010001110101110010110100000101001000000011100110101001110010001001101011000100000001110010010010000101010000001101100001110101110110000101111100001010100000011011000011101011101100001011111000001100110101000111111011100001100011110000000110110010101110000011110010000100001111011010110100000101000011111110010001110010000000110111010111001101010000001101110100001101110010100111100000101111011001001001100100001110110101011010000000101111000001000100011100010101101011101000111000101100001011111100111010100100111101110001100010000011111100000100010001110000011100101001110100000010001011100110100000111101111100001100011000100000111010010001001110101101000000010111100010000101011100111100100000011000100100000001010100000000101010000110111011000110101000000011100010011110000100000001011110000111010100001100001001010001111011110000101101010001010001001111011101011101010101001101001011011100011000001100001011110101110101110100011100100000001110100101000011101101010000000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000011000100100001111101001011111001011010000001101100101011100000100010001110000110001001000010001100110100110111011111000010110100011100000101111000001100000011100100011011001010110000010100101111011100001101111011100101100000101100000000100001001110011111101001010100000101000111001100001101011100111100110101000111000110110000101101000010011110011011100100010011101111100110000011101111001010000011100110000110011101111001110100110111110000101101101000000101010000000111101001000101000101101110010001001110001010010011001001001001010011000011010000001100010101011000001010100000111001000000011111110101011101100001000000010011100011100110000110011100010011010110001101000001010000111010000100101011100011100100000001101111011001011000110101110011010100000001011110000111010100000010111110000101110100101010101001101000001110010001110101111011100001110111000110000110101010110110010101110010000100010000000100111000001110101100111101100110101101000001010000010010100000111101111100001100001011101100000001111111000011001101001000010001000001100010000001110100101000010111010011111110101000111010011001100001101100101011100000101111000001001010001000010001100011011111100010100000100101000001101101011010111101100010100000111011110010010111010110100000010110100001010100000110110000101111110010011001000111000111100000000100101011100011011000001111011101110101111010011111101011001101010010001110111000001011110001010010001101100101011010011011101101001100000100010000111010100011001110011101011010000001010100010100010000101011100111101010000110010011101011111010111000001011110000011011010010000001101110101000110101001001110011000100001000000011110010000100001111011010110100000101000011000100001101111100100011110000000011001101001001001101101000100111100111110101000100101100100011000100000111111000001110101011110111001010100011100100000001011100000101000001011011000001010100000001111001010111001000101110101110000011100100100100000100101000011001010111101110001100000110000101000110001111000000111001000000011010101010000010101000001110111010110011000101000000010001100010101001100111011111000001010100000011000100011110101110001101100001100100111111000001100100010011101110000011000110001001110000010111101100110000010100010100000110000011100101110101000100101001100011011000110000110101010110111110000000000110111010111001101010011001100010100100000010001011100101000000010010100101010000000101111001000001001110000001001100110000110111101110001000001011010000101101000011000010010101111110000010111100010100111010110011010101101000111000001101001100010001111111010110001000111110011000001101110111110000101110011010111000100001000111010001011100101000111000011111100111110101011010011010100011100000111101101001111011011111000001010100000011000100001101010000000100010001110001100100101010011001010001111100011001100000101000011010110110110101011011111000111011100000100010000001100010010000100011001100000101100000000101111011100101111000001000100011100001011110111100110100111001000111000001011110000010010100000110011010101000001011010110011010110100100000000101111000001100000010101100010010000010101001100110000111111000101011101000011011100101001101110010101100000000101111000011000101000110001010000101101000000110111101110010110000010100001100101001101110010110110100101010000011001010111000010010000000100101000110110000011001100100010101111000011001101101000001011110000011000000111001000110110010101100000101001011110111110001100001101010100100000001110100111011000011001101001110110101001100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100011110011010000101010001010001110111001110111011001101111000001011110000011101010101110011101101100101100101000110000100101000111101111000110100100110011000011011001010111000001011011100101010001101100001110101110010101001100011001101010010001110111000001110101100110100000100101000011111011110011011100101001101000110001000001100010010000111111110000100100011100000111010110011010000010010100001100100111011011000110000111010000010111100010001101011010111010001110001100010000101100011010011011010010011101111100110001100010000011000100001001011100100100100110111001010100001100010010000000101101000010101000111110011000101010101000000111100000011100100000010111001101110010101110000100100000001100111100000011111010110001001100110000011101011001101000001001010001100100101011110001010000011011011001011000110111101000001011110000010010100001100010000110101010100011010010110100101110001100000110010100010101110111010110100000011011001010111000011101010000011001010111101000001100110101011100000101111011100101111000111001000000011101001110100110111110010000011010100001101111100001011010000000100101000001101111110000100100100100000101111000001001010001010010000101111101110011000001001010111000010001011100110101110000011001101010111100101001000000101100110011110011111001001010010110101110001010000111010100001101001101101001111111110000001100010000011111100110111111000010101100011000011101110001100001101011000011110001100000101000010101000101000011110100100110101011101000101001101001110001001101101000110001000011001011011111000000110100100010100011011101100010100101101110011000010101000000011000100001101111001010100100100011110000000011001101001001001101101000001011110000101111110011001101110000111010000110001001000000001100110010001001001111011100000101111000011000100001000100100111101110001010010011100111111001111011111001100000101010001110000010101001001001101110101011010010011101010001111100110000101010000000011101010101111010100000011000100100000001010100000001100101011101011101011010111010000000111111101001111110110000101111101110110001001100110000101010000000110111010101111001010110100000110010110111110000000011100010010110000101110100101010000011000100000101010000000110001001001100110100100000001010100100000101111000001111011010011110110000010110000001111000000011000100001101010101000110100101101001010000011101010110011000000011001111010110010100000100010001110000110001101111101001111001000111110011000001000100011100001100111100100101010001110001100010000001001010111000001111110100100001001101100010101111100011000001100001000100011100001101010011000110101100010001110001011000110100110110100100111011100000111010010100011011111011100101101001010100011100010000100000011101101000010001000001111000000001001010000110010101111011100110000111110110000100000111100000001011010000101010000011100100000001110010011001000100101001010100110011000111100110110000000010001000111000001111110100100001000100011100000101111000001110111001001111011100011000 ;00110000100101000001001011100100100100111010100011111010010110100101000001011110000011000001110010111010100010010100010110000010110111001010100010100000100101000001110101100100001100010010000000010010100000101111000011101010000001101101100111010010101001100011000011010101011000101111010011110101110011000001101111100001010001011011100110000111111001111011110011011100110001010110110010101110010000100101000001101010101100001011110010000010111100010001111001001111011010100011100011011000011011001010111110010100110110000101110111001000100111011111001100010100001101100101011011111000000111100000010001101100000111110110101001100000000110101000011011111000010110100000001011110000111010100000011110110100101101000011111100000100101000010011000100110100000011001011000010111011001110011000001110101100111101100110000010100011101110101110110010001111000000010110100001011010111000001110101100101011111011100000101111011100101111000111001000001010011011011000111011001111001000011011110101110101110100000110101010110001000011110000101110011010010110100000100101000100001000110001101111111100110000111110111100110100111010011110000011101111001011111100111110101011010010110100000111001001001000111001000000111010101010011110111000011101010011101010100110010100000001011110000111010100111000001110010000100001001111001110110001110111000001011110000100001000011000101000110001100001101011011001100110101100110110101110001010001110010000100101110011000001000100011100000111011010111010001110000010111100001011110111110011001101000001111101000010000111011110100101101110011000001000100011100000110101010100101000111000001011110001100101011001100101000000111110110000001111000011001010010010110011100110000010001000111000100101101010010111010111101011000100011100000110101010111110010001001110111000001011110000011011010010111110011010000110001001000011101011100101010110100101010001110000011100100100100011100100001000100011100000110111010111001101010001110001110111010111011100101011000000011111011110011010011101001111000001001101001101001110110101000111110011000110001000000100010001110000011110110111111000010010001110001011001011000100100011101110000010101001000001011110000111111000001111101010101100100101101110010101000001001010001001010000111010100011100110000110110111101001001011100101011000000010101000000010111101110010110101000000100001000100100100000101111000101001001100101010110111101011001011100011000 ;0011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010111001100001101100101011100011110011010001110010000001101110100001101110010100111100000110100110001001110001110011010011101001111100000101111001010100100100001101100101011100001111110000011110111100111000001010001100001010100110100110001001110001111000000001001010001010010000101111101110011000011011110111001011000001010000010111010111001110010101110111010110100000001011110000101110100100000001101010000101010000000100101000001110010001111101011001101011010010000000010111100000100101011100001100101011110101111100110000110110010101110000010111101110010111100001011010000101101011100000111001000010111000001010000010000100111001111110110010111111000101001000001001110000001000001100010000101110010101011101011111011001111001011111100000101111000101001111101010101000011000100100000011010011111010101010010000011101110011001101010111100111000011010011001100011000100000101110011011100001101101000000010010101110000110010100100001001110111000011000100100000001011101100000011001001010111100000001111111000010111101001010100000011011001010111000100011011000001111101010100010100001100101011110100010011110110011011100101100000101000001101001100010011100001110100001000000110110010101110000100010111001101000101000001001010000110111010010011010000010111100100000011001010010001001001110001100000110001111000000001110010001100010001110001010110101110100011111001100000110000001010110001001000001010100000001100110101011100001010100010100010100100001011111010000011010011000100111000010010010010111110001010010110100011000100000010010111001001001001110101000111101000011011001010111000011000101010100100011011001010110111110011010000010111100000100101011100001100010010000100011001101001011010111000011011110101110101110100011110000101101001000011001110111000001110010010010000111010100111000011010110111000011010110111100110101101111000001101111011100101101010111011000010111110111110001100000110001111001101000111100000000111101111001001011010010100001010100010100010100100001011111010000011001111100100110111000011110011000001010100100000101111000100010100101110111100011110011010000011011011100010010010010000010111100001011100111111011000010111010001010110101110100011100011000100000010101001000001011110001000101001011101111000011011110111001011000001010000011010101011110010101101001100011000 ;011010110011110111001011110000010001000111000010111101111001101001110010001110000010111100000100101000001100110101010000010110101100110101101001000110011000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010000110001001000011101011100101010110001001101000000101110011010011010011101010111000110001000011000010101010100010010101111100011000001100011110000000011100100011000100000010111101111001101001110010000000100001001111000011010000000101111000010110101010010011101101101001001110111110011000011001011000101100111010100011111001100010111000011010100010011111000010010001110001100010000001110111010111101100110010100110000100100011100010000100000011101101000010001000000010010100000111010010100001110110110100001100101011110111001100001111101100001000000101101000010110101110000010010101110000010111100000100101000101001000010111110111000110000011000111001000000110001001000011001101111100101011010000000101111000010111011000010110100011100000111000110001011000010101100101000111000001011101011101011110110000101101000111000001000010011100111110110100000101000011111110010000101110110000001010101101010100100101110100101010010011100110000110110010101110000011000001110010111010100010010100001111110000101110100111001101000000010001000111000010011000000010101000111000011000100100000001100111100110100000101111000101110010111110000101010111000001110101100110100010000100000001110111100100101111100100011100100000011111110000101111010010101000000010111100000100101000100111110100100110100101101001011100011000001100001001010000011101001110100110111110011010000011110111110000110000110110010101110000010000100111001111101101000000010010100001011100111011100100101000000101111000001100000011100100011011001010110000010100101111011100000111101111000001011101111100000101010000011001001000010010101110000010111100000111101101001011001110101000000011101011001101000111001000000010101000010001001001000001011110000110010111001011111000011101110011000010110100001010100000111001000000011010101010000010101000000111111000011101001001001110100111110000010111010110100000001011110000110110010101110000110111010101100101101111100110110000000011100100001011101001010100000111100001100010010000101110011011001000101011011001010111001000010010100010100100001011111010000011101111001001011101001011010001111000000111001000000111010000111001001001000001011110000010010100001100110100110010010001010011111101110011000110001000000100010001110000011111110101011101100001000111000011000100100000110011111011110110010100100000001101100101011100001111110000110111101110010110000010110000000100100111011111000010111010010101000000011100100100100011100100000011001011000010110100000001011110000010001000111000001110001100010110000101011001010001111100011000 ;0110101010110110010101110010000011101110011101100000100111010101101010000001011110001101100011010110011011010101111010011110101000011101000110011011010010000000101111011110100111010110011110110011010110100000111100000000111001000110001000000101111011110011010011100100110011000101100110011010111010111001101001010100000001110010010010000010010100000110011110111111001010011110000010111100000100010001110001101001101101100011101111100110000010001000111000011000011000100010001100010100010001000111000101011101011100101001000011010000110111010110001000111110011000001000100011100001110101011101101011101000111000001011110000101110011010111001101010100101110101100110101101001000000110001000000100101011100010110000111110110101110000010111100001100010010000100011001111001000001001010111000001101101100110100111101101001000010010101110000010111100100000001101010101000001010100110001100001101011001111000111001101001110100111110000010111100101010010010001100010000001001101001101001110110101001100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100001111110000110001001000001111011011001010111101011010000011110000000101010000000110111010000110111001010011110000010111100010101110011101110110001011010000001101110100001000011111101110000110011000101000110011000001011110111011000101011010010110100101010000011110000001110010000000111101110111010111101100111001100001100010010000000101010001010001100101011001110010101000011110100100001111010111000010111000011011001010111000001100000111001011101010001001010000010001000011111100110111001010100001100010101010010110011011001000101000001010101010011010111000001110111100010101110000110001001000000010101000000011000101001100011011111010010000100010000000101111000011000100011001101100010111000110000110101101010100000001100111010010001011011010000001101100101011011111000000001000100000011000100100001111101001011111001101100110100000111101100000011000101111010011011010000010111100010100100001111101101010011000000111001100001101011100110101101011101000000111010010010101111010010011100111111101010011000110000011001010011110010100000011011110101110101110100000100010001110000011010011000100111000011000100100000111101111000011001101001010100011100000101111000011101010000001000100011000101010011010001011100101011000001010100100010110010100100000001011100110111001010111000010010000011000100000011001110100110111010010011011010111000001110101100110100001111110011111010101101100100100010011001100001100010101011000001010100000011111100011101100011011101101000001010010000001101110100001101110010100101000000111010100111000011011111110011001101001101110111110000101110101110000010111100000101111011100110101001000010111011001110011000110001000000111011010010111010110100000111001000000110001001000011000101010010111010000000101111000010110100001010100011100000111010110011010001011100101001110110010000101010001010000101110010100011000110111101000011011001010111000001110010100111110111110011010001010000011000000101011000100100000101010000011110000000110001001000010111010110001011010000001100010010000000010001000111000001111110011011000001011110111000110110000011110111100001011010001111100011000 ;001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010001101001111110000100100110111001010100000111001001001000011000100001101001110001001110101101000000010010100000111111110100001111110011010011001111000001010000010111100000100101000100111100111111101011010010001100011000001100101011011100101100000101000011011001010111000011011110101100110110100011100100000001100000100111001110111110000101111100011101110101110111001010100000100101000011111011111001100110100011010011010011101111000111010111001101110010001001111100110001100010000101001000000100010111001010000000100101001010100000001011110000010010100001111101111100110011010000010010100010110000101111010011111010101010000110011010101000101101001010000010111100001101011011101111010100011011110101100011011110111001100000101010010000010111100011110000000011001000011100100011001010111000001110101011110100101101011100000110001100111111001111101101010011000000001001110000110111101110010110000010100001100010010000101110100101010000011100100000001110100111010011011111001000011010101010101001111001001101101100001000000110101000010101111000001011100000101110011000011101010000101110010010101110010001000011000110000011111011001000001100001011010011011000011001101011100001101011001100110101101011011010111000011111100000101101110010101000101001000000010111100111001001001010111110000010111100001100101110000111011001000011001011101001101101100011101110001010000110010101101011101001000101110000110100011111001100001101100101011100000100010101110011111010000001101111010110011000001010001001111001101111100000101101100100011000100001001111001000010011110001011001000001011110000011101011100001010100000111010110011010000010000100111001111000110001010010111111001000100011100010100000100101000100111111011000101000011010110110000111101110010111001001100011000001100011110000000111010100001100001001010001111011110000101101010001011100110000011001000010000011000100000111010100111000011011101000011011100101001111011111001100001100010010000000011010101011000010111100111101110001100010000100011010110101110100011100011000100001011000110100110110100100111011100011000100000101101000010110100001100001001010111111000001011110001111000011111110011110111000001010100001101001100100011101011110101100010001111100110001010101110011010011110111011110110010100100000000100101000011111011111001100110100011001001010011101100101100000101010000001010100010100001111010010011010010110100010100100000001101101100111001100011000100001010010000001100101110010010000000101111000001111011111011000010111101011100110010011010111000001101111011111101110000010111101111101011101011110111110010100100000000101111000001001010001110011010011101001111011110100011000100000011001101010100000101101100101001000000101000001100000010101100010010000010101000000011101011001101000100001000000101111110001111001000011011001010111000111001101001110100111110000010111110010001110010000001100101001101110110000100000001011110001001111001111110011110111010011000110000011000111100110111001100000111001010111011111001100001010100010100010010101001011101000011011001010111000100001000000010011100011011000010111111001111011110111001010111001100000111001001001011011001010111000011101101000010001000000011100100001011100000101000011000100100000101010100110011011001001000100000101001000000011101010111101001010100110001100001101010100100000011101010100100011101110101110111001010110000000010001000111000001110101100001011101100001000111110011000011000101011001011011111001010110100011100000101111000010101000101000111010111111001100010100010001010101110100000111101110011111111010111010010011001100011000100001110010000000111101010111010110100000010101000110100111101111001011101000000010111100000100101000011001101001100100100010100111111010000011111100110110000010111111001100001101100101011100001111110011111011010100110000000101111101110101111010011010100100011010100000001011110000010001000111000001111111010101110110000100011100001100101100111101100110000010100000101111000001001100000001101110101011111011111000110000011000010010100001100110100110010010001010011111101000001111110011011000001011110000111111000011000100100000110011010101000001011100000101000101001000000011000001001101100011001101001011111000010111110000110001001000000010101000101000111001100001101011111100001111101011010010000001010110001010001100010010111101011001010000111110110000000110111010010011101110000110100100001011111011111001100000101010010000010111100001101111011100101100000101000011001110101100110001001100111010001110000010111100000111011011110010000000101111001001101011001010010110100001100010010000000110010111001011111000011101000110001000001011010010010111010000000101111000001101010101100001011110011100110000110110010101110000011101111001001011100000101100000010100000100010001110001000101001111011100111111011000010111110111000011000100100000011100100000011011111101100011011111011100001101000000010111100001110101001110000101111101011101011100000101111011101100010000110101010100010100100111011111000110000011000010001000111000001111111010101110110000100011100010001010011110111001111110111001010110000000111111110101110000011011110111111011100000111001001001000111011110100010010101001011101000101100001011111011100000101111000101001000110010110001100001110110010001110010000001100110110000101101010100101101001000000001011110000101111011111001100110100000110011110110010011011110000011100100100100000101010010000010111100000111010101111011100101011000000001001010111000001101010100010010101110000010111100100000011000100100110011110100110001100001101011001111000101011000101011110010010101000000110001001000000001000100011100001100001100010001000110001010001000100011100000101111000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001011100110000010010100001101010011000110101100101000001110010001111101110010110100100110100101101001010000010111100001100010010000101110101100010110100000011000100100000000100101000011001101001111011010010011011100001110101100110101101001000000111100110100000100101000100101010010111010000010111100100000011010110101010010010101111111000110000110101100111100000110101000010101000000110110010101110000010101000101101101000000010111100001101111111001100110100110111011111000010111010111000001011110000010111101110011010100100001011111000110001000010110010011011010111000001011110000110010101100111100111000001010001010000010001000111000001101110101110011010100011100001101110100001101110010100111101110000110110010101110000010001000001010110001000011010011101010110101111011001010010000001111000000001001010000011001101010100000101101011001101011010010000000010111100000110000001010110001001000001010100001100000100010001110110001101110110100000111100000001010100010100000110101000110001101111101001001010000111010100111000110110000111010111001010100011011111000010110100011100000101111000010010011101111100001011101011001101011010010000001100010000011101010011100000110110100111010101111100110001100010000111001101001110100111110000010111010110100000001001010000101111100110111110011011001110110100010100111101111000010110101010011011100011000 ;0011000010001000111000001110100111010011011111001010001110000010111000001010111000100001000001111000011000100100001011100110110010100100000001010100000001001100100111010110011000100110001010001000100000101001110100111101100110110111001000100111110001100001101011001111011101100111100000101110111110010100100000000111001001001000001001010000011101110010110011110011111010001111010001001110111001011110011010000010111100100000100111000000100000011011110101110101110100011100100000001000101000111111011001000111100000001101100101011100010101101011101000111000101100001011111011100001101111011100101100000101100000011110000110001001000010111001101001010100000001001010001011001001101101001010101010011010000010111100100000001111101010111100110011111001010011001100011000100001010010000100110000000000111011110001110101110011011001010010000001010010000011001001000111011011001010111000001110010010010000101010000000111111100000101111100101000000010111100010001011001101100011000010010001110000111110100100001111011101110101110011110111110001100001101010100100000010110011001001001001101110110000100000001011110000010010100000111010011101001101111100110100001111110011011011000101110011000001101101010111011001010010000001100010000101011110110010100100000001010100000000111101111000101001010100110011000001110111100101000000111111000011000100100000110011010010010011011011001010010000000110001001000000011000100001101111100100000100101000001101110101011101001010001100010000011110100100101100100011100100000100111101110101101000000011101011001101000001000100011100000111010010110100001100001111010011010100011100000101110000010101111100011000011010110000100110101011101110010101100000000101111000101001110001001011100001110110010000110001001000000111011110100000111010011110110010101010011001101011010010000000010010100010001110110011101111101001011010010100000101111000011111100111110101011011001000011000100001101110111110000010101000000011111010101010110010100110110111000101010111110011000011000101011000101010000110010110011000111000101110000110101000100000010111111000110000010100001010100000000110001001110011101111001010000001111011100100100100100000101111000101001000011011101110000110110000100111110001100000110000100010101110011111010011001100000101010101001101100001011111000001101001100010011100000101111000001011101111110000110000010111000001010111110011000100001000000011110010000100001111011011111001010010000001010000011110111100100011100100000011101000010011000110000011000111001000000111010101110010001000000111111000001111001000010000111101101011010000011001000100101100000101010000011000100000110111011010100100110111100101010011001100001100010000110101000000110011110001101110000111010000011110010000100011000011000101000110101100101110011000110001000000100101000001111011100111111110101110101100110101101001000000001100110101011100001100101001011010000011110111110000110000011010011000100111000110110000111110100101110101000111101000110001000001111110000110111110101100110111110010100100000001100101001011010000011110111110000110000011010011000100111000001001111100001010110000100011100000100010001110000011111100111010101101000111000001011110000010001000111000001110001100010110000101011001010001110001100010000001001010001100100101000100001001011001101100000111111010000010111100000100010001110000011010100100001000111110011000110001000011100100000001101010101000001010100000011111100000111100100001000011110110101101000000101110011101011101011111000001110101100110100001111101111001101001110100111111000110000011000010001000111000011011101000011011100101001111011100000101111000001001010001110011000011001110111001011101011001101011010010000000111111000011111011000010111101111100101001000000101110010100101010001101101001010100011100000111001001001000011101010011100010011110110001010111100100101010001110000011010011000100111000101100001011110100111110101001000111000111100000010101101100101011100100000001110101100110111000000111010000000101111000011011101010001101111001011010010100011000100000111110100100111100001100110101001100110001011000010111111001110101001001000101001000000011101110110010100101010000001001001110100111111101100010100100110011000001010100100000101111000001001010111000110010010001011101011100001111110000110111010101000001011100000101100000011110000000011100100110000110100011100000101111000101011001111101010111110111000011011101010001101111101100001011111011100011000100000010001000111000001101101011000110111111010111110111000001011110111010111001010011000011101110010101100000000100110110011101010001110000111101100000111111001110111110000101101000111000110001000001111010010010100110110110000010110011010111000001010100100110100101101011111000110000110101100101010100110110000101111100001010100010100001111110011011011000101110011000011001010111110100001111101100000001101111011100100010010110011100110001010011110101100011000011101100101001000000011000100001101010000001110100100000110001000110111001001010001000100011100000111001001001000010101000000010101000110100111101111001011101000000010111100000111011101111010010101010001101110010100111111001100010100100010100011011100101001101001010100011100010100111011110001010111000001110010010010000101010001010000101111110000101011100010011110011110111100111001011110011010110011010110100100000000101111000110110000111111011000101101000111000001000101000110111011000010001110100011100011000100000110001001000000001000100011100000111001010001000011010100100011101110001010011111010011001011011010010101000111000001110010010010000101010000000111010000110011010001100101100001011111000010000100010010010000010111100001111011000001111110011111100011000011010110101010000000111001000010111000001011000000100111100111111001111011110110011100110000011100100100101101100101011100000100101000010111001010001100011011110100001101100101011100011011100101011000000101110010100111011111000001010100000101000011101010000001110101011101000000111111000001111001000010000111101100000101000101000011001111001100110110010001111000000001110010001100010000001011110111100110100111001001100110000110001001000000010101000101000001111011100111111110101110101100110101101001000000100001010111001111010100001101100101011100001100101011111010000011110111110000010110000000110010011110110011110010001011000010111110000111010100111000010011000010010001111100011000001100001010011010110101010000011010011010011100100100101011101000001100011000101111011001100000101000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010011000110110001100000110000100010000011101111111000011001101101001000001110111000100001000000011101111001001011111001000001001010000100100111011111000010111010110011010110100100011000110011000001010000011001010111011110011010011101001111000001110111100000101110111110000101111100000101111000001001010001100101001011010100111000010010100010010111001100001111101001111101010110101101000000011111010101101101100000101010000010100001110101001110000110111010000110111001010011110111000011011110101100110110100011100100000100001001001010111110001101100000111101101011111011100100010011111001100001101111010111010111010000110110010101110000010001000011111100110110010100100000001111010010011011001000001011110000010010100010011110011111110101101001000000111100001100101100001011101001011011100011000001100011110011010000101010001010001000010001100011011111100000101111100001111011100110000111110110000001110111010111001111001000010010101111100110000011101111001010000000100101000010001110110001010100111010010110100101000111011101011101110010101000110100110100111010011110011111100010100101101000001110010010010000101010000001011101100111100010000101011100111100100000110001000000100110100110100111011010100110001100001101010100111110100010111010010101000111000001110010010010000010010100000111010010100001000100100000111111010010110100001011100110100111101110111110000010111001100001100010000100001111110110010100100000000100101011100001101111010011011010110010101110001100010000001010101010010011011101111100101001000000101000001100110100100000101010000000111001001001000001110100111010011011111001101000001111011111000011000111100000000101010001110000111111001101101100010101111100011000011010110100010101011000001010100000001011110111001110111100101011101100101001000110011000110001010100001100010010000001110010000001110100001000001010010001011010011001100001111110000110110010101110010110110010100100000000111010101110011011010010101000111000001011110000011001110101110110011011000101011001101011010010001100011000001100001011010011111000010111110001010001110010000100010001111100110001001010000101111101001010100000001011110000110111111001001110110001101110100011100011000100000011101010010000110111110011010111110011000110010001001011000011000100000110001000000111001000010000111100100100111011111000010110100000111100000000100101000011111010010011110000110011010100011110100000100010101100001100000101111000001001010000011011010110101111011000101110011000111011101011101110010101000010101000000111100001001001001101111000001111110100100111011010010000001110111001110101011010111010000100110001100000110000100110100111111111001101001101111100001011111000001111001000010001011111101001010100000101000111011101011100111011100100100100111001100000101111000011101010000101100111001001000010010100101010101001101000110110000101110101100010111010000110001000010000111111011100101011000000001001010111000001110110100100010111001101001100111010111000111011101100010100011000100010011010010110101110000010111100100000001111011100100101001101111100011001100011110000101110011110001100001010110010110011011010111000101001010100100110001010010110101110000010111100001001001011011001010110000000101111101011111000110000011000111001000000110010101110110001001100110000110001010110010110111110010101101000000110001001000000010101000101000010111111001011110100001100010010011011100001110100000101111000100100110010000110101001001101000001110111010111001110100110011110101100101001011010001100010000001101010100111001111101000000101111011111001100001001100110001110111010111011100101010000011001111011001001101111001101111100001011111000111100001100001001010011110101001010100000111100000001010100000001110101011100100010000000101111000001110110111100101100110101111100011000011010110000010000101101000001001010001110111010111001010100110001011010101001101000001110101100111101100110000010100001000110001010001110101100100001010100000000110001000110111001011010101101000000011101001010000111011010100110011000010101000000111011100111010101100110101000000010111100001110100001001110010110100101000110001000000101111000010000100001111011010010101001100110000011110111001011010010101000001010000010001000111000001111011010110011010100011100000101111001000000101111011110011010011100100000110001000010100000100101011100001100010001110101101010001101110010100111101110000010111100000100010001110000011100011000101100001010110010100011111000110000011000111100000011100100000110110000101111110011101010010011100110000110110010101110000010001000111000111001100001100111011100101110101100110101001000101100111010100011100011100110000110011100010001001001101100101001000000011000100100000001010100000000110011111100100111100100100100001111101001111111010010001000111010011001100010000100000011011110111001011000001010001000101001011010000011010011000100111000011011001010111000010101000000101001110100111101011101001010100000110010010001110110110010101110000010111100000110011001000100100111101111100011000 ;00110001110010000001101111010010000100101110000110011111010000000101111001000000011111101001001110110100100011001100011011000001011101011001101010000000101111000001001010000011101001010000110000111101001101110100101101001010000010111100100000001101101100111001100001101100101011111001010011011000010110110100000111001000001100000001101001110111010110101000000101111000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001011100011000011010110100010010000111110100101111100110111001010100001100010000110101000000101010001010001100100101010010010010100000101111000011101010000010111001101001111011011110111010000000101111011101011110110000100000011011110111001011110010001100100101001110110010100101010000011100100000001101101100100001111101100000011110000011000110000011000100100001011100110110010010001001100110001010010000000111010011110110011010100000001011110000111101011001001110100110011110101100110101000111000110001000000111011110001010010011010010110100101111011100001111101100000001100010101111000010110100110011000110001000001101111011100101111001001000100000111100001100010010000101110011010010101000001111000010110100100001100111011100001111101100000011001001010011101100101100100100010011001100010101011100110100111101110111101001010100000111100000001110101000001100101001101110110000100000011000100001101010000001010100000001001100100111010110011000100110001010001000100000110110000111101001000011110101110010001001111100011000001100000001010011000110111010001110001010110101110100011100000101111011100111001010001100100011111001100011100100000011000100100101001000111001000000110101010101010011110010011011011000010000001101010000101011110000010111000001010000011110010000100001111011010110100000101000010111001101001111011101111011001000001001010001001111001111111010110100100011001100001100010101011000001010100000111100110100011000101010000101010001010001001010100101110100010011110011111010100010010110010000010111100100000011000100100110011110100110011000110001000000100010000001101010011000110101100010000001101100101011100011110000110001001000010111001011010000000101111000001001010001000101001111011100000110011010101110001110010000001100010001110101111010010000100101100100001100101100111001001001000110111000011101001010100000111100000000110111100101110101000000010111100001010100000001100101001101001110010000000101111000101001101101001110010000100101011111000110000011001010101101000010001000001111000010110100100001100111011100001100010010000011110111100001100110100101010000000101111000011011001010111000101011011001010111001000010010100001101111101011101011010010011101101000100001000000110111101110010110000010100001111101001010100000010101000000111100000111111111000001011001010000000101111000001001010001101001101101001111111011000101011001101011010010000000010111100001110101000000111010100101100111111001100001111110000011101001111001111101010100001011011010000001100011010000110101000000110111101110010110000010100000111001000010111010010101000001110010000000111111010010011101101001000000101001011111000010111001101100101111110000110111101011101011101000111011111100000111001010100001011010000011110000000101111011111001100110100000110011110110010011011111100011000001100101001111001010000000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000100001000000111111000001110001001011000010111110110100000111011110100011011000011011001010110111101011010100010100001100010101011000001010100000111100001100010010000101110010110100000111001000000011011011001110011000101001000000110010111001001000000010111100001000101110010100011100001100010101010101110010100000001011100000101011100000101111000001111011011011100001011111001100010100000101010001100111000011010110110101101001000110100001101111010111001010001110000010111100000101110101110101110110000110011011010000010111100100000001111110100100111011010010001100011000001100101010101001110000111010101110110101110100011100001011111100100110111011000101110010101100000000110011100111110000101111100010100011101111110000011011011001000011000100001000100100100000101111000011001111000110111000011101110011000111011100111001010001101010001110100000110001000001110101001100110101001100110000110110010101110001000010000000110111110011110110011000001010000010001000111000100111011110111001111101000111000110001000001111010110010011101001100111101011001101010001110000010111100001110101000010100111101111000010110101010011011100011000 ;00110001100011000001001010110101101001011001101110000100100011010110111111000001100011000111111001110101011011010000110001101100011000001100000010101100010010000010101000001110111010110011000100001001010000101111101001010100000001011110001010011111010101010000011100100100100001011010000101101011100000111010110010101111101111100011000 ;001100001001010001101001011111010000010111100001010100000000110000001010110001001000001010100000001110111100011011000011101010001001011001000001110100111100111101010010011101100110101101000000010101010100110110000101111100000110101010011000110111010000001011110111100110100111001001100110001101100001110011101101100110100101101000111100000011100100000001101101001110101000101100111001011010101110011011001110101000000110110010101110000010111011100100101011000010011010000000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000101001000001001111001111110011110111010000000101111000011101010000111001100001100111011100101110101100110101101001000110001100000110000100010000001011100110111000011011010000001100010010000001001101110010110110111001100011100110000111010011000110000001111111110011011000001010100000001011110000011011010010010100000110011111000001001010111000001011101001100111101011000101000100010111010010111101110000010111100001100010000110101010100011010110010101100110101101001000110011000011000100001101010000000111010110011010000110010101110101111010011111101100101111110001010000111110000000000110111010111001101010000000111001001001000001001010001011100100111010000100010100101110100000110011101001000101110100000101111000011111110000101111010010101000000110001001000000011011001010111000111001001101001111111010110100000111001000000010001010001111110110011100011000001100001010011010110101010101000011001010000010000100111001111110110011110011010100011100010100010001101100000111110101010001010000011101011001010111110000011000110011111100000100101001100011000000110111110000101110111001010100010110000101111100000110000011100101110101000100101001100011011000110000110101010110110010101100000000100001000111000011011111100110101000111000001011110000011100101000101100111011001000111100000000111101101001011010000111110110000001001111011001101110010110110010000010001000111000110010111100011100110011110101100110101000111000001011110000010010100001100110111110000110011011011100011001100000101000001100011101111010000110011110010101111010010101010001101110010100111111001100010010101000110111011010010110100000111101011001110101000111000001101111011111101110001111000000111001000000110001010101100101011110101011010000000101111001000000010010111001001001001101010110100100111010100110011000001000100000001000010011100111100110100000101000011000100100001100111110010110110010001110010000000111010010100110001011101100010110100000001011110000101110011010111001001010010110110010001010000011000000101011000100100000101010000010100001010100000000100010100011111101100100000110100110001001110000011101001010000111011010110011010100110001100000110010100111100101000001110111010111010000011110111110000111100110000011000001110010111010100010010100001111110001011000010111101011001101001110011010000010100001110101001110000010111101111101001111110001101010001110000011001111111001010011101001001110111110001100000110001111000000010101000101000011111101100100111101011101000111000110100110100111000100101011001011100100010011100000100101110010010010010000010111100001101110100100100110111010011111010101101010111010000011101001111001011101011100111001010011101000001010000010010101110000011010101011000010111100111101110000010111100000100101000101001000010111110100001100010010000101110011010000010010100000111101110010011111010010110100101000001011110000111010100111000011011101000011011100101001111011111001100001101100101011100011000101010001110011010011101111100001110111001010110000001010000011101001111001110101100110110010111111000001110101100110100000100101000001101010100010110110001100001110111000110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100010000100000011101010001110010000011110000000110110010100011001000000011010100001101111100001011010011001100010001101000111100000000111101101100101011010100010100000101111000011011001010001100100000001100110101011110011100001110101110001010010100111101111001011110101111100110000111010100111000001110001001011000111011100001111110000011001101010111100101001000000111100010011110010110110000010101000001111000000010101000101000001101101100110101101011110100000101111000001110100111101011111001100001101011010001111100110000110001001000010111001101010111101111001101001110010001110001100010000111001111010101111101001111010101111100110000110111101011101011101000011000100100000111101111001010111101100101111110001111000000001110010101001101000110001000001111101001101001110001001110001101001000101001111101011010010001100011000001100000111001011101010001001010000010001000000100110010011111110010011110011010000001100010010000000101010001010001010101111110000110011010110100100000011011000010001100111100001011111110011000110001000001101111010111010111010000111110110000101111010110100000001110010010010000011001000010000001010100000000111001000110001000000010111100000111011011110010110100101110011000001001010000011011010110101111011000101000111100000001101100101011100000100010000011110000110001001000010111001011010000011110000001110010000001100010101011001010111101010110100000001011110010000000110011010010000010101000000110001000011011111000010111011000001010100000111100001011100111100000101110111110000101111101110000111010100111000011101010111011010111010001110000010111100000110101010001011011000110000111011100110000011011101111100001011100110101110000110001000010001000110010111001010100011110000000111010100111000011001011100001010101110000100100111010011111110110001010010011101110000010010101110000011101101111110000111010111000001011110010000000100101110010010010011010101101001001110101001100011000001100001000100000001011111100001001101000000101111110010011011101100010110011100011000001100001000100000001011111100001001101000000110000100101001111010110010000010010101110000110010111000010101011100011000100000011100100100011110010000111010100111000110110001101011001101101001001110111000111100001100110100110110100001100010010000000101010000000110111110101110100001110010000011110000101111011000010111010010101001100110000111110110000000110111101001100011000001100111100100100111000100011011000001111101101010011000000100111100111010010100011000110111111110011000001110111100101000000111101110010110111110000010101000001100010101000011011001010111000001100100001000000111101110010110000010100001101011011111000111001001001011011001010111000011111100000100010000001001100010011010000000101111011001101100100011110000000111010100111000011101001001001010100011100000110101001000011010000100010000111110100011101101011011100100001101100101011100000100010001110000110111010000110111001010011110111000001011110010000000111001010111110010001000100000100001000000010001000000111111011000101010000010110110011100000101100000011110000000111010100001110011010011101001111011110111000110000011001010101101000010001000000110001010101100000101010000011100110100111011111000011011010000010100000101111011100110101001000010111011001000001001010000011100101011110010101110100000101111001000000110001010101100101011110101011010011001100000110000011100101110101000100101000011111100010101011100111100111101101011010000010100000111010011110011111010101000010111011001001001110000011100100100100001101100101000110010000000100010000001101111010110011000001011100110001100010000001100100001000000010011100001100010010000101111101110101101101000000110001001000000010101000101000011001101111100101011101000101001101101100100111110101010011010110101100010000011000010100011001010001010111011101011010000001101100101011100010001010010111011110000110110010101101111100111100011011001011111111001100010000100011100011011001111001101010001110000111010000100010001111100011001100000101000001100000111001011101010001001010001000010000001111110001010010001011111100101101001100011000 ;001100011001101011010101000001000010001110001101100111100110101000111000001100011000101110111000010010000110001101100011000011010101011011001010110000000010000100011100001101100101011100101101001101010001111100110000011100100100101101100101011100010101101100101011000000000110111111001101010001110000101111110001101001010100000010101000000011011111011100001001001100011000 ;001100011001101011000001000010110100111101100000101000100001000000101111110001110011010100011100001010100000000110101010111100101011010000000110001100010111011100001001000000011001000010000110001101100011000001100000100001000010000010000100000111011100000101111000100011011000001111101010100010100000111010110010101111100000110111011111000010111001101011100010000100000010111111000001111110100001010100000000110101010111100101011010000011001010111000010010000000100101000010111101111100110011011100011000 ;00110000011100101110101000100101000100111100111000100110101100011010011001100001100010010000000101010001010000111010101010011110111000001100111101100100110111111000011101011010110001 0011000110001100101011101000111011100010001110110011101111011001110101000000110110010101110001100010010000000110111100000110101010111100110100000111010110011010000110110010101110000111111000011011001010111001011111000000101011011001010110000011001100000110111100000110101010111100101001100011 0011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100010000100000011001001111110001001101000000110110010101110000011001101010111100110100001011101100000010011100000001111111010010110100000100101000001111001000010001010100001011101001010000010111100001110101000000110101010110000101111001110001100001101011000010011010101101101000000010111100001111110010101010011001101100100100101000 ;01100010010000001110010000001101111110110001101111101110000110100000001011110000111010100000011001110110000101110101111100000101110011000011000100100000000100101000001110100101000011011110111101000001011110000101010000000011010101010000010101000000011101001010000101110100111111101010001110100000001010100100000101111000110010101011101011101110010101000011000100100000011101100011011110110010000101010000100011100000100110000001101100101011010010101000111000001101001100010001111111010110001000111000111100000000100101000010111101111100110011010000011101011001101000011011001010111000001001010111000001110001001011000010111010111000001011101111100110110000000011001110010101001011010001110001010000011110010000100010101000010111010010100000101111001000000110111010000110111001010011111100110001100010000001010100100000101111000011111100000111101111000001011100000101100000010100000111010011110110011010100000001011110001100101011001101010111101001000010001000000101101000010110100001100001001010111111000001011110001010011101011001101010110100011100000111010110011010001110010000000101010000100010010011100011000001100101001111001010000000110000011100101110101000100101000001100110101011100011011000011111110000111110111001000100111000101000011101010000011000010010110011101001111011010010111110000110011011011100011000 ;0011000110001100011110000000011110111110000110000010111100010110000010110110010000011101111000011110110000010101000001111000000010110101001110001010010001000110010100101101011100010000100001111011100100111100111000001010111110011000001011111100101110111000010001100010100011101011001010111110000010111100001011010100111000011011111011100001001000111000001100011010011110011100010011010110001101000011000110110001100000110000001100000100110100100010001110000110001101000011010100000111011101011001100010100011001100010111001010110000010101001000101001010100011100010100000100101000110010010101111000101000001011110000110101100111010100011111001100011010011111010101010010000001101100101011100000100010001110001100100101010011001010001111100011000 ;0011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100001011010000110101101000001010010000000111011011110000010111100000100101000001001110101110011010000010010101110000011101010010010111001010011010111000001011110000111010100000011010101011000010111100111000110000011000000110110010110100000101000010111001101001111000110010001110000010111100000100101000001111011110000101110110001010001100010000001111011010100000101000001000100011100000101010001110001000110101101011101000111000001011110111011001010010011000011010001110001111000000001001010000110111010101111001010111010000111010000100111101001011011100110001100010000010110101000111100100000001001010001101001101001110100111101111101011010010000000010111100001101100101011100001110110100001000100000111100000010101101100101011100100000110110000111010111011000010111110000110111101110010110000010110000001110011010011101111100001110100101010000010100011100110000111101011101011110110011100110000110001001000011001111100101101001010100011100000111001001001000111001000000110001001000110000100101010010100000001011110000011000001110010111010100010010111000110000110101010010000111110100000010001100010101001100111010110100000111100001011010010000110011101110001111000000011101010000110110000101111110011101010010010011000001000100010100100001111101000000011011101011101011111100111010100011101000001100010000001011110011001111011000110101011110100111100100000011011001010111000001000100000001011110111101100110011011101001111101101000000010111100001110101000001011110111100110100111001000001010110001011010101010010000011000100000010001000000010000100111001111001101000001010000010010100000101111100111010011110101000001110010010010000101010001010001001111001111111010110100100000011011000111001100001100111000100010010011010010110100000101111000001000100011100010011110000110001010111100100101010001111100011000001100000011011111000010111001101011100000110000011100101110101000100101000011111100111110101011000001010001100101011001100111011111000001010100000001001010000110010101111010000110110010101110001010110111010010011010001110111010111011100101010000111111001111101010100110100000101111000100001000001011100101011000001010100100010110010001111000000111001000001001111011101011010000000101111000011101010000001111011010010110100000110010000100000001110111100100110110110001110110011010110100000011000100100001011111001101001110001001011000001010100000101000001000100011100010001101011010111010001110000110001001000000001101110110011010010110100010111001001110100100101011101000011011110101110101110100001101100101011100000100010001110000100110000100100011100001111110000010011100001101110101000110111100101111011001101111100101001000000110001000001111110000010001000111000011111101100011010000001100010010000001110010000000101010010010111010000000101111000001001010000011011011000010011001100011000100001110011000011011011110100100011010000001010100000001101110100100000101010000001110101001110011101101100101000000010111100010011110111110100111111000101011001101011010010001100011000 ;001100011001101010000101011110000100000001100011000101110111000010010000110001101100011000011010110011101001001110111000011011001010111000001111011110000011111101100000010100010111000100101000101101100100110111100010100001111010110010110010000010010101110000110001000111101011100000101111000001000100011100001100101110000100100100011101111100011000 ;0011001011010001110011001000000110101011001011001010010111010100110011000111001000000011011011100010010010010000010111100000100010001110001000110101101011101000111110011000011011110111001011000001010000110001010001101001110001001101001010100000011001010101101001001011001110001010110101110100011111000110000110101100001111000110000010100000100101000011001011100101111100001110100001100010101010010110011010010110111001100011100100000001110111001000100000011011111011001011101010010110100000110001000011100100000011001011001001100010011000101111110010000011110010000100010101000010111011001110101000111010000000101111000011101010000001110101001011001111110001100001101010101010100001101100101011100000100001001110011110101110010101000111001000000011011101011100110101000001101001101001110010100010001110100000001011110000110010011110110011010011011101111100001011010000011000100000011001101001001010111010010011111000011101000001100111100000011111010110010111001100011000101010000010111101110010111100011110000101101001000011001110111000111100110100011100111101101001011111000010111110000110110010101110000110010110011110110011000001010000010111100011010011011010011111110110001010110011010110100100011000110000011000010110010101110000110001001000011001111100101101001010100000110001000000101101001010100000101000001000101011000011000001010101010011011000010111110000010010100000111011110000100011110100001011100110100111101110111110000010100000101111000001001010000111110111110011001101110011000101100001011111011100000101111000001001010000011001101010100000101101011001101011010010000000010111100000110000001010110001001000001010100110011000110001000001110101001110000011101010010110011110111000001011101111100101001000000001111110011010110011011010111000101001000000110011011110010001000001010010000001100010000110100111010010100110010101100100001101100101011100010000100000010111111000110000010100010001101100000111110110101001100000001101001001001111110110000100000001011110001011000110100110110100100110001100001101010101010100111100100110110110000100110011000111001000000011101001110100110111110010000111111100100001101110101000110110110000100000011011001010111000100010101100110101101000001111000000001100000010101100010010000010101001100110001101110010101000101000011000101000110100111000100110110010000111111110101110001010110101110100011100011110000000011011011001110000110100110001100000110001111001101000011111010010011110000110011010100011101000001100010000100111101011100110111000000010101001100011000001100001011110111001011000001010000010000100010010011010010101000001111000000111001000000011110110111110000101110011110000010111100001110101000000110110100101100111100011000100001000101011001101011010000001100010010000000010001000111000010011000010010001110001011100101101111100101011010001111100011000001100000011011111000010111001101011100000100111000011000100100101011101110010101100000011100100000010000110111001000100110100111110100000001101010000111101100000101000001001010000110010111001011111000011101000001011110000101010000000010010100101010000010100001000101110010100000100111101100010010000100011001101111100000101010000000100101011100001100010001111010111000001011110010000001100010101011001010110100110011000110001000011100110000111010011011101100010111001010100011100100000100101000111010111001010000000101111000001001010000011111111100001011111000011000100100000001010100010100001100010101001110101000111110100101101001010000111110110000001010111010000110111001010010100110001100000110000100010101110011111010011001100011011000001011101001100111111001111100001011111000101000011011001010110111110001110111000011111100010101100111100101100101110010101100000010100001100010010000100011001111001001000100110011000001101101100001011010100011110010000000100101000101010111111000011001101011010010000000110001001000011001111000010111001101001011010001111000000111001000000101111101100011011101000000010111100000111010100100001101101110011000011011001010111000001110101100111101100110000010100010100000111001010100001011010000000101111000001011111001100101010001101110010101100101111110001100101011100001001000000010010100001011100111100110111110000010110100000111010011110111110101101001000000001011110000010010100000100001000101000111101101101110001100000110000011100101110101000100101000100001000000011110010000100001111011010110100000101000101011000100100100101101100101111110000010111100000100101000110110000101111110000111110100101101001010000010111100011101111010000011011101100110100101101000011011110101110101110100001010100000000101110000010100011110000000110110010101110001110010000000111011101101100101011101101011101000000110101010101010011110010011011011000010011001100010100000100101000111001011010010100000101111000010111001111011100010101101011101000111110011000111100001011100101101000001010000010010100001100010001100110110001010001111000000111001000000011010100001101111100001011010000011110000000110110010101110001110010000100101000100111101011110110011011100101010000010111100100000001100110100001111101101001000000110001000000111001001000110000010100011110000000010010100000110111101111010000101010001010000100001000010010100000101111000011001010010000101010000001101111101100100111101101111100000101010011000110000011000111001000001000110101101011101001100110000011101111001001110001001111100001001000001111000000001001010000011100101011110010101110111001100000101110111000010010001101011000100000110000101000110010101111000001111010100010100001100101111100111000110011000001010000011000010010100001000010000100101000111011101011101110010101000110010110111110000000011100101011101110101110100011110000001110010000001100111100001011100101000000010111100000100101000001101111011110111001100000111011110010100000010111011000000001110100101001000010110100000011000100001101010000011100100000100011010110101110100000011011111011100001101000001110010000010110000101010000110011010100110011000110110001101011001101011010000001010100000000110101000011110110100110111011111000010110100000110110011001111001111001000110010111001000100111000011011110101100110110100011100100000110010010010010010111111001100001100010000110101000001101001101001110010100010001111010010110100000111001001001000010101000000001011101100010100110111010111001101010000011011000010111111001110101001001110011000110001000001111110000010111101110011101110010110111000011011010000011110000001110010000001110101011100100010011000110000011000001110010111010100010010111001100010100100101100100110110100101101110011000001001110000110001001000010110110100000111001000001110011101101011101000010111010100000101000011101010000001101101100111010010101001100110000011101111001010000000110010001110101111100000100010000011011000010111111001001110100111101011011010000001100010000110101000000101010000000011001111110000110100001101111100001000001000101010110101010011010010011000110000110101010111110000000000110011010101110000111110111100110100111010011111100110001011100001011110000100000101000001001010001110011000011110101110101111110000110011011010000010111100001110101001110000110111110111000010010001111100110001111000000001110101100101011111000001110010010010110110010101110000110001001000011111010010111110011011100101010000010010100011011000001100111011000011001101101000011000100001101010000001010100000000111011110011100000010000101010000000101111000110110000111010100011001111010110011011111000011001101101000001101111100001011101001001100110001100010000111100000000111010110010101111100000111001001001011011001010111000011111011110011010011101001111000111011101011101110010101000001011110011011010111110110100101010000010111001001110100100101011010000011110000000111010100111000001110100101000011101101101011100011101110011101110110001010001001010110011010100100011101110000110110010101101001101001100100100111010110010101111100011000 ;001100101001111001010000000101111011100101111000001001010000101110110010010111100011110000000110110010101110000010000100101001101011010000010100000100010001110001000110101101011101000111000001110101100110100001101100101011100000100010000010111000100101000101101100110110000001010000010111101111110011010011101010110010110010000010010101110000110001000111101011100000101111001000000010010111001001001001101010110100100111010100110011000001001110111000001011110010111010110001101000000111010100111000011011101001001101011100000110111111000010010010011110111110001100000110001111000000111001000000110001010101100101011110101011010000010100111010110010101110100101010011001100001100010101100010101011100000111010110011110010111101110000111111000001100110101011110010100100000000100001001111000101100000101010000000111001000110001000001010000011100100011000100000001011110000011011010011101010111000110110000011110111100101000111110000000110111010010011101110001100010000001111110010011000100011001111010110001000111000001100111011100100101000100010001110100011111001100000100111011100011110000111111011010111011010000010100000100111111100100011000100001110111011001001110111001011011001000110001000010100001111010110010110010000110001010111100001011101011111001100011000100000010011101110000110111101110010001000110100000001011110000010010101110000011011011001101001111011010010000100101011100000101111001000000011010101010000010101000001000010000001110110100001000100000011011110101110101110100000101010010000010111100000100111000101001000110010110001100001110111001010110000000111010100111000011000100100001000110011010011011101111100001011010001111100110000111110110000100000001100110100100111000011101100000101010000010100011100110000110101110011110011010100011100011011000011001001111110000011001000100111011100000100010001110000010011000000011011101010111110111000001011110000111010100001101001101101001111111011000101011001101011010010001100011000001100001011001010111000101011111000000000110001000011010100000001000100011100010001101011010111010001110000101111110010011011101100010110010100100000000111001001001000101001110100111110000010111110010000110110010101110001111000000111001000001110011000011010111001111001101010000000110111110011101001011101010010001010010000000101111001000000011000001001001001100111001110101100101000011011110111001011000001010000110111010000110111001010011110111000010111011000000110110000101111100100110100111111111000010111110111000110001000000111010101100110000000110011110101100010001110000110110010101110000111010100000110101001100011010110001000001111000010111001111010111111000110100110111011111000010110100000111100110100001111111000010111011001011111100010100000111011110000111101100111001100011000100000110110010101110001111001101000001110010001111101110010001001110001010101110011010011110111011110110010001010000011101101111000111001000000011011011001000001100011100111111110100000011110100100010111011000001010100000001011110001101011100100101000111100000011010111001001010000110111101011101011101000111001000000011100101011110010101101000000010111100000110010101101001000110100100011010110010111000110000110101010110110010101110010000100101011100010100100010100110011011000101100001011111011100001111110111110101001000111011100001101100101011100101101100101001000000001011110000101110100100000001101010000101010000011010011010011101001111011110101110001111000000001001010000011011110011010100100111011010000010111100000100010001110001000110101101011101000111110011000011011001010111000001101010100110001101110100011100010101101011101000111000001101001100010011100001011101100100101111110011000010101000000011111100111110101010000010101000001011000010111110111000001011110000110110010101110001110010000001000011001111010110011011010010000000101111000001000100011100011111000010001100100100101100110101011010001110001001111001111101010001001011001111011100000101110111110011010000010010100001001001001011111000000001011110000011001101010111001111101000001010010000000111011100100010001011011010010000000010111100000110011010100111110100100101001101110111110000101101001100110001110010000001100010010010100100011100100000011010101010101001111001001101101100001000000110101000010101111000001011100000101000001111001000010000111101101011010000010100000111101101001111011011001000001001010000101111011100101101101000010111011001001011110000010111100000110110110011100001101000001111000000011011001010111000011101010000001110101001011001111000110110000101111110011001010100011010011101101011010000000100101000001001110110001100110101101001000000001011110000011001111000000111110101100101110011000110001000001111110000110110010101110010101101000000011001110101110110011011000101001010100110011000011000100100000000100101000001101101100001000001111000000111001000001011101100111100011000100000010001000111000010011000010010001110001101100000110101101000011110110100100111011111001100001001100010111100000101010000010100000100101000001011101011101011101100001100110110100000100010001110000011101100000001100111011000010001110001100010000010111010011011100100100100111101110001100010000011101001000101110000101010111000001011110000010001000111000001111111010101110110000100011100001101100101011100001010100010100000111101111100001100000110100110001001110000010000100111001111110111001010110000001010000010010100010100100001011111011100110000011101001111001111101001000101100000101010000011100100000011010100100100010111101001101010000011000100001010111010000110111001010010100011101000000010111101110110001010110010100111010011011101111100001011010000000101111000001000100011100001111011100101101010001110000010111100000110000001110011010011100110111110101111100011000 ;00110001111001101100000000111111101010111011000010001110001000010101110011110010001111100011000001100001011101000011011100101001111011100011000100000011010101011000010111100111101110001100001001101000011110111100011101110000110110010101110000111011010000100010000001100010010000100011001100000101100000001110101000000111010010100001110110110100000100111100000111110101010111001100011111000010111001101001110001001011001111011100001101111111001001101010001110100011100000101111000001110110111100100000101011001111101010111010010110100011000100000011011011000010001110001101100001011111001001101001111111110000101111101111100110000110001010110001001000111000110010101110100100111011100011000100000011010110101001011111010110010101110000111111001101110010100110110010100100000011110000000010010101110000110010100100001001110111000010101000000001110001100010100011010110001000000010111100010100100110010010010010100010111010010110100010100100111001111110011100000101110011000011000100100000001110101001110000010001001001010001110000011101101100001011101001010100011100000101111000010110100001010100011100000100010001110000110001000010001001001111011100001101100101011100010011110110011010101110111001010110000001001010000110110110001100001110101110001101010111010010011011011000101011111001100011000100000010010100000111111010010000100110110001010000110110010101110000011100100100011000001010000101010000000110011110000101111110001011001000001011110000110111010101110011110010001110000010111100001001001010000010100100000011101001000000001011110000010010100000111010110000010111110011110101110111001100011000100001110010000000110101001000010000010100110110111101110101110011010010101000000110110010101110001010010111010011110110110001011100101010001110010000000111011110000111101001101110111110000101101001100110001100010000001001010000011010011000100110110010101101100010100000110101101010010010001011110100111000100111000011011001010111000011111110010011110110000010100010100100000001101110101110011010100000010111101111001101001110010000000111010110011010000011101110011111101100100011001001000101101001000111011100011000100001100101011100001010110010000010010100000110011110111111001010011111100110001100010000111001000001010011101011001101010110100000001110101100110100001000010000111101101001011011001000001000100011100000110110100100010001110001001111011000101011110010010101000111110011000110001000011100100000111001101001110001001010111010110100000001110101100110100000111011110010010111110010001110010000001011110111100110100111001001100110001100010000010101000000001101110100100001001011001000001011110001101100000111101111000011001101010010001110111000001101001100010011111001100001011101100000011011000001111111110001101010001111010111000111000110110000111011010000100110101011101011111001100001101100101011100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000011011101010110010110111110011010000110110010101111001110100101010000011011000001111011110000101110110010000010010100000110100110001001101100101011011000101000001011110000010010100000110111100110101001001110110100000111010110011010000011100100001011111001000101011000100100100101101100101111110000010111100001011010000101101011111000110000011000111100000001010100000011011000011101011101100001011111000010111001101100001110011001101001001001101101100101001000000001001010001010010000101111101110001100000110000100010001110000110111101110010110101011101100001011111011100000101111000001100000010101100010010000010101000000111111000111100001100010010000101110011011001010010000000010111100000111010010100100001011010000000111011110010010111010010101000111000111100000001110101001110000011101001010000111011011010111000011001010010000100111011111001100010101011010101001001011101001010100011100000111001001001000001001010000011001111110011101101000001101010100010001011110101011010100010111011000101100111011011100011000 ;00110000100001001110011110101100000101010000001010100000010001101011010111010000000101111000011001010010110100000110110110000100000001110101100110100010000100000001110111100100101111100100100010001110001111000000111001000000101101010001101010100010001011010011001100001011100101000011101111100001110110000010101000000110001001000000011110100100010111101001101110010101100001101100101011010111000001011110000010111011111000010111110111000101011000100100110111000011101001010100011100000101111000010010010100000110001000000110110100100101110010101100111010111010111010111000001011110000111111110101110001100101001101110000110100011111001100001110100001100110100011001010010101000000011100100100100011100100000011000100100000110011010100111010000010100100110111110000101101000000010111100011101110101111010011001001001011000100001000001100010000011100110001010000010110100100010000001101100101011100011100110000110110111101001001011100101010000010010100000110101010011000110111111001010101000110111001010011111100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100010110000010110111001010100001100010000110101000000101010000000010001000110001000001100100101001110110010110000010101000001010000011000000111001000110110010101100000101001011110111000001110010010010000101101000010110101110000011101011001010111110111110011000001110101100110100001101100101011100000100111000100111100111101110010010110011010000010001000111000110110000011001111011000110101011010001110000111111011001001111010110100011100000101111000101011011001010111001000010010100000111011101111010010111010010000100101000001100111011100100101000100010001111011100011000001100101011110000010111011001110100111111101011010000010100000111101011001110101000111000001111111010101110110000100011100001101100101011100010000100000111100001011111100000101110111110010100100000001110101000000100111100000111110101010111000110000011001010001001001000011010100100100010111101001101010000000100001001110011111011010000001101111010111010111010001110010000000100010100011111101100100000101010010000010111100000110000001110010001101100101011000001010010111101110000111010000100110000010100000111000100101100001011101100100001110101000001011110111110000010110111001100011000100001111000011000100100001011100101101000000101010000001011001001101111100011010100000010111010110011010101101010100110000100000011011001010111000101100001010100001100110110111001010100011110000000110010101110101111100100001001011000010000001010100000011000010101100110111001011100000111010110011010000110111101011001111001011111100011011000001111011010111110111001000100111110001100000110010101111000011011110111001011000001010000101101000011011010010101000000010111100001010100000000111110100001000011101110000101010001010000110001000011101010000010111100000100101000011101010011101011101100001100110110100010100110111001010110011101100010111001100001100010101011000001010100000001100101101000111001100100000011010101100101100101001011101010000001101010000101011110000010111000001010000111111000101110010100111010110100000001110101011101000001010001110011010011100101011000010010010001110111000001110010010010001111000010111001111000111001000000011111100101010001110010000010111001001110100100101011010000001101100101011100000111010011110111111100001100110110111001010100011100100000111011100111011101100010110011000100110001010001000100110011000110001000010100100011001011000110000110110100000101000011011110101100111100100000100101000001110100111100111110101010000101110111000110000011000111001000000011111110101011101100001000000010011100011110000011110010000100001111011010110100000111100000011100100000011000010011010011011010001010101101101001000110101011010000000101111000011101010000001101110110011010010110111001100010110000101111101110000010111100001100010010000011110111100101011110110010111111000111100000001010100000001100011011110110010110001000000010111100010100100011011001010110101011100100110001010000000011101110111010111101001001111000010111110001100010000011011101010001101111101100001011111000011101001100101001111000111001000000110001010101001000000110110010101110010101101000000011001100100010001011101100000101010000000100101000100111101110100100010110000110011011010000010111100001110101000010011110111001110010101110111010111010110101100010000011000010100011000000111001000110110010101100000101001011110111000001101010101001110101101001100011001100000101000011010101010110101010010010111010010101000000011100100100100000100101000100001000101111010110011011011100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100000111011110010011011011000111011001101011010000011011000001101011010000111101101001001100110000101110011010101110110000010101000000010111100001110100110010100111100111001001000111100101111110001010000010010100010100110011001001101011000110011010110100100011001100001101111010111010111010000110110010101110001110010000000111111001010100011100100000011111100000101110101110011101111001011101101000001001111011000010010100110110100101010000000111001001001000010001011100101000111000101100101011110100110011110101100110101000111000110001000011100100000011000110111101100101100010000000101111001000001011001001101111100011010100000010111010110011010101101010100110000100000011111100011100111101010011100100100101101000000011100100100100001100010000110100111000100111010110100110001100000110000000011000100111000010111011001001011111100110000100010111001010001110000011111110101011101100001000111000001001110000110001001000001100111101100100110110110010100100000001101100101011100011110000001110011001111101100010110100000001100000011100100011011001010110000010100101111011100001101111011100101100000101000011101010011000101000110111001011010010101000001010000010010101110000011001111011111100101001111011100011110000000010001000111000001101001100100001011011000010001110000010111100000110010101110110000011111101001110010101001110011000110001000001110101000001100010101111001001110010000001101111011100101100000101000011111010010101000001011001100101001100001010100101010000011110000001110010000000100010100011111101100100000110100110001001110000011101001010000110011010101000001010100000001011110010000000110110110010000010111100000110010111010011110101110001100001101010100000100010001110001000110101101011101000111000100001000000010011101110001101100001011111100111101110110100000001001010001000010001011110101100110110111000110000011000111011101011101110010101100000001001100100111010111101100010100101010001110001111000000011011001010111000011101010000001110101001011001111000001000100011100000100001001110011110101100110100010100001100010010000100011001111001000001001010000011100100100101011111100001011010001111010001000010000111101110010110100101000001011110000010001000111000011110111001011010100011100000101111000001100000011100110100111001101111101011111001100010110000101010000110011011010010110100010100000100101000111100001011100110100101101000001011110000101010001010000101111011111000001011010000110110010101111100110000111111001111101101010011000000001011110110011000001011000110011000001110111100101011111100011101100110101101000001010010000010011111100010000001100101011010010001000011010110100100011000110000110101100001011000010110100000110110000111110101110101111011111001010010001100110000110110010101110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100000111010100111110110100000001000100011100001011100111111011000010111010001001111101001001110111000110001000000100010001110000110001001000001010101011000010010000001101111010111010111010001110010000001100111100001011100101000000010111100000100101000011001011001001110101110011000001010100100000101111000011011110111001011000001010000101010000000011111110100111111011000010111110000010111100001011010010010111010000000111011100100010100010101000001100010000011001011100101111100001110100010011010011101010010110111001100001100010010000000101010000001011000110100100001000100000001011110000110001001100101001111000111100000000100101000100010110011101110000110001100010000010101000101000001110111011110100101101000011001010010111110001010000010111100001101111101111100110010100000111100000011100100000010110100110010110100100001000100110011000011000101001110101101000010111011011000001010100000010101000000011000100001100111001111000001011110000011101101100110101011101110001100001101010100100000011111110010000010111101110101110100111010100101010000000111001001001000111001000000011111110100111111011000010111111100110001110010000001100010000110011100111100000101111110000100110100000111011101100101001110101100100001010100000010100100110111110000101101000000011111001001010110011011010010011000110000110101100111110000101110010100000011101101000010001000000110111101110010110000010100001010100000011110000100100100110111100011001000100010001101100101011100001011100110110000111001110101100111110000101111111001100001100010010000001101100000110011110110001101010111010111000101001111101010110000101010111000110110000101111110011000101011100011110000000010010101110000110001010101001001110111000011111100000101111011100111011100101101110000111011100101010001111000000111011101011100111100100001001010111000001011110000110001000010001001001111011100000100101000011000010010110011101001011010010100000101111001000000110010011110011100110101001011101100010100010001001100011000011010110011110111011000100100001100111100101011101001010100110011000011110111001011011111000001010100000011011001010111000001000100011100010001101011010111010001110001110111001110111100110111001010110000000101010001010001110011000011001110001001101011001010110011010110100100000011011000001101111001011101101010111011100110000011001011010001110011001000000110101011001011001010010111010100000011010100001010111100000101110000010100001111110001010101110011110011110110101101000001010000011010101010010011010101010011011001011010110001000 ;0011000110001100011101110001110010000000101110110100110110110000101111100000110100110001001110000011111100110110000010111100000101111001000000011010101010000010101001100011 001100011001101011010101000000011000110011000100100110011101001111111010110100000111001000000011111110101011101100001000011000110110001100000110001110111000011011111011110010001001100011 00110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101110011000011111011000000111100001011111100000101111100111001100011100110000110101111110000010111010110100000001001010000011011011000010000001101111010110011011010001110010000001011001100100001101001110101100001001100110000011101111001010000011100100000001111111010011111101100001011111000011111100000100101000 ;1010011101011001010110110100110001100000110000101001101011010011011000011000100000100111110100100111011100000110100110001001110000011101011001101000010110100011001011001001000100001100000101110011000001011101110000100100110001100000110010110100011100110010000001101010110010110010100101110101000000110101000010101111000001011100000101000001000100011100000111010100111110110100110011000110001000011110000101101001000011001110111000001110010100111010000000100101000001101101100001000000111010011001010011110001110010000001101111101111001000100110011000110001000000100101000001101101100001011010100011110010000000111001010111011101011101000001110010010010000011110101100111010100011100000110111011000010100101101000111110011000001101110111110000101110011010111000111001000000110001001001101110000110110100100000001111110000010011100001101111101100001100011011110111001010100000101111000010111110011010100100100011000100000010111100011000010011010100111001011010010001000001010010000001100010010000101110101100010110100000001011110010000000110111010111010111111001110101001100011000001100101011101100000001111011100101111001000011011001010001100100000001011110110011011001110011000001110101001111101101000000100010111001010001110000010111011111100001100010011111010010011101110000011101011001101000011011001010111000011101010011100001101111101110000100100011100000111101101001111011011111001101100000000100101000001110100101000010111010011111110101000111101000111001100001100111011110011101111100001100110110111000110000011000111001000000011101110110110010101110110101110100000001100101101000111001100100000011010101100101100101001011101010000001111110001000111001111101101000001010000101101000110010110010010001001100011000011010101010101001111001001101101100001001100110001111000000011001010011011100101101010011001100000101110101000000101010000000011101010111010000001101111010110011011010001010010111100100101100001011111110011000001110010100111010000000100101000001101101100001000001100010000001001010001001111010111101100101101000001111000000111001000001010110001011010011000110000011000010100011000111011101011001100010000011011111011001001111011011111000001010100001100000101110011000111001100001101100001001010011010110100000101011101010011101011101001010100110001100000110010100111100101000000111010100000011101010010110011110001000010000000100111000001110100111101110101101101000001010101111110000110011010110100100011000110000011000111001101110010100111011010011111101001010100000001110010010010000010010100011100111101101001011111000011001101101000001011110010000000111010010100001011101001111111010100110011000111100000010101101100101011100100000001101010000110111110000101101000000111111000010000100001111011010010101101000000010111100000100101000001100111001010100111010111001101011001101011010010000000010111100001110101001110001110011010011101001111011110101110000010111100100110110011011000010111110111000110001000000101111001000000110001010111100100111001000000010111100000110000001110010001101100101011000001010010111101110001011100101011000001010100100010100101010000010100100000101001110111010111101010110100000001011110000010001000111000011001010010010100110110110011110111110001100000110010100101001111101101000000100010111001010001110000110011011000011000100000100111110100100111011111001100011000100000110001001000000001001010000011011011000010000000111001010111011101011101000111100000011100100000010110011001000011010011101011000010011001100001100010000110101000001110011000011001110100111101111011000001010100000010101000000010111110111010111101001101010010001101010000001110100110010100111100011100100000010111110011000011010110100000011110100111111001101001010100110011000111001100001101100001001010011010110100011010110001000 ;001100011000110000010010000111010111110001110111000111001000000011111100110110000001101100000111101111000010110100000001011110001000010101110111010111001010000001011110111100110100111001001100011 ;