|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Binary Number [127,-128] to 7-Segment Displays** | | | | | | | |
| **Number** | | **7-Segment Displays** | | | | | |
| **Decimal** | **Binary** | **Hundreds** | | **Tens** | | **Units** | |
| **0 a b c d e f g** | **Hex** | **0 a b c d e f g** | **Hex** | **0 a b c d e f g** | **Hex** |
| **0** | **00000000** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 1 1 1 1 0** | **7E** |
| **1** | **00000001** | **0 0 1 1 0 0 0 0** | **30** |
| **2** | **00000010** | **0 1 1 0 1 1 0 1** | **6D** |
| **3** | **00000011** | **0 1 1 1 1 0 0 1** | **79** |
| **4** | **00000100** | **0 0 1 1 0 0 1 1** | **33** |
| **5** | **00000101** | **0 1 0 1 1 0 1 1** | **5B** |
| **6** | **00000110** | **0 1 0 1 1 1 1 1** | **5F** |
| **7** | **00000111** | **0 1 1 1 0 0 0 0** | **70** |
| **8** | **00001000** | **0 1 1 1 1 1 1 1** | **7F** |
| **9** | **00001001** | **0 1 1 1 0 1 1 1** | **73** |
| **10** | **00001010** | **0 0 1 1 0 0 0 0**  **0 0 1 1 0 0 0 0** | **30**    **30** | **0 1 1 1 1 1 1 0** | **7E** |
| **11** | **00001011** | **0 0 1 1 0 0 0 0** | **30** |
| **12** | **00001100** | **0 1 1 0 1 1 0 1** | **6D** |
| **13** | **00001101** | **0 1 1 1 1 0 0 1** | **79** |
| **14** | **00001110** | **0 0 1 1 0 0 1 1** | **33** |
| **15** | **00001111** | **0 1 0 1 1 0 1 1** | **5B** |
| **16** | **00010000** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 0 1 1 1 1 1** | **5F** |
| **17** | **00010001** | **0 1 1 1 0 0 0 0** | **70** |
| **18** | **00010010** | **0 1 1 1 1 1 1 1** | **7F** |
| **19** | **00010011** | **0 1 1 1 0 1 1 1** | **73** |
| **20** | **00010100** | **0 1 1 0 1 1 0 1** | **6D** | **0 1 1 1 1 1 1 0** | **7E** |
| **21** | **00010101** | **0 0 1 1 0 0 0 0** | **30** |
| **.**  **.**  **.** | | | | | | | |
| **29** | **00011101** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 0 1 1 0 1** | **6D** | **0 1 1 1 0 1 1 1** | **73** |
| **30** | **00011110** | **0 1 1 1 1 0 0 1** | **79** | **0 1 1 1 1 1 1 0** | **7E** |
| **.**  **.** | | | | | | | |
| **39** | **00100111** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 1 1 0 0 1** | **79** | **0 1 1 1 0 1 1 1** | **73** |
| **40** | **00101000** | **0 0 1 1 0 0 1 1** | **33** | **0 1 1 1 1 1 1 0** | **7E** |
| **.**  **.** | | | | | | | |
| **49** | **00110001** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 0 1 1 0 0 1 1** | **33** | **0 1 1 1 0 1 1 1** | **73** |
| **50** | **00110010** | **0 1 0 1 1 0 1 1** | **5B** | **0 1 1 1 1 1 1 0** | **7E** |
| **.**  **.**  **.**  **.** | | | | | | | |
| **99** | **01100011** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 1 0 1 1 1** | **73** | **0 1 1 1 0 1 1 1** | **73** |
| **100** | **01100100** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 1 1 1 0** | **7E** | **0 1 1 1 1 1 1 0** | **7E** |
| **.**  **.**  **.** | | | | | | | |
| **109** | **01101101** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 1 1 1 0** | **7E** | **0 1 1 1 0 1 1 1** | **73** |
| **110** | **01101110** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 1 1 1 0** | **7E** |
| **111** | **01101111** | **0 0 1 1 0 0 0 0** | **30** |
| **.**  **.**  **.** | | | | | | | |
| **119** | **01110111** | **0 0 1 1 0 0 0 0** | **30** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 0 1 1 1** | **73** |
| **120** | **01111000** | **0 1 1 0 1 1 0 1** | **6D** | **0 1 1 1 1 1 1 0** | **7E** |
| **121** | **01111001** | **0 0 1 1 0 0 0 0** | **30** |
| **122** | **01111010** | **0 1 1 0 1 1 0 1** | **6D** |
| **123** | **01111011** | **0 1 1 1 1 0 0 1** | **79** |
| **124** | **01111100** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 0 1 1 0 1** | **6D** | **0 0 1 1 0 0 1 1** | **33** |
| **125** | **01111101** | **0 1 0 1 1 0 1 1** | **5B** |
| **126** | **01111110** | **0 1 0 1 1 1 1 1** | **5F** |
| **127** | **01111111** | **0 1 1 1 0 0 0 0** | **70** |
| **.**  **.**  **.** | | | | | | | |
| **-128** | **10000000** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 0 1 1 0 1** | **6D** | **0 1 1 1 1 1 1 1** | **7F** |
| **-127** | **10000001** | **0 1 1 1 0 0 0 0** | **70** |
| **-126** | **10000010** | **0 1 0 1 1 1 1 1** | **5F** |
| **-125** | **10000011** | **0 1 0 1 1 0 1 1** | **5B** |
| **-124** | **10000100** | **0 0 1 1 0 0 1 1** | **33** |
| **-123** | **10000101** | **0 1 1 1 1 0 0 1** | **79** |
| **-122** | **10000110** | **0 1 1 0 1 1 0 1** | **6D** |
| **-121** | **10000111** | **0 0 1 1 0 0 0 0** | **30** |
| **-120** | **10001000** | **0 1 1 1 1 1 1 0** | **7E** |
| **.**  **.**  **.** | | | | | | | |
| **-119** | **10001001** | **0 0 1 1 0 0 0 0**  **0 0 1 1 0 0 0 0** | **30**  **30** | **0 0 1 1 0 0 0 0**  **0 0 1 1 0 0 0 0**  **0 1 1 1 1 1 1 0**  **0 1 1 1 1 1 1 0**  **0 1 1 1 1 1 1 0** | **30**  **30**  **7E**  **7E**  **7E** | **0 1 1 1 0 1 1 1** | **73** |
| **-118** | **10001010** | **0 1 1 1 1 1 1 1** | **7F** |
| **-110** | **10010010** | **0 1 1 1 1 1 1 0** | **7E** |
| **-109** | **10010011** | **0 1 1 1 0 1 1 1** | **73** |
| **-101** | **10011011** | **0 0 1 1 0 0 0 0** | **30** |
| **-100** | **10011100** | **0 1 1 1 1 1 1 0** | **7E** |
| **-99** | **10011101** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 1 0 1 1 1** | **73** | **0 1 1 1 0 1 1 1** | **73** |
| **-90** | **10100110** | **0 1 1 1 1 1 1 0** | **7E** |
| **-89** | **10100111** | **0 1 1 1 1 1 1 1** | **7F** | **0 1 1 1 0 1 1 1** | **73** |
| **-80** | **10110000** | **0 1 1 1 1 1 1 0** | **7E** |
| **-79** | **10110001** | **0 1 1 1 0 0 0 0** | **70** | **0 1 1 1 0 1 1 1** | **73** |
| **-70** | **10111010** | **0 1 1 1 1 1 1 0** | **7E** |
| **-69** | **10111011** | **0 1 0 1 1 1 1 1** | **5F** | **0 1 1 1 0 1 1 1** | **73** |
| **-60** | **11000100** | **0 1 1 1 1 1 1 0** | **7E** |
| **-59** | **11000101** | **0 1 0 1 1 0 1 1** | **5B** | **0 1 1 1 0 1 1 1** | **73** |
| **-50** | **11001110** | **0 1 1 1 1 1 1 0** | **7E** |
| **-49** | **11001111** | **0 0 1 1 0 0 1 1** | **33** | **0 1 1 1 0 1 1 1** | **73** |
| **-40** | **11011000** | **0 1 1 1 1 1 1 0** | **7E** |
| **-39** | **11011001** | **0 1 1 1 1 0 0 1** | **79** | **0 1 1 1 0 1 1 1** | **73** |
| **-30** | **11100010** | **0 1 1 1 1 1 1 0** | **7E** |
| **-29** | **11100011** | **0 1 1 0 1 1 0 1** | **6D** | **0 1 1 1 0 1 1 1** | **73** |
| **-20** | **11101100** | **0 1 1 1 1 1 1 0** | **7E** |
| **-19** | **11101101** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 0 1 1 1** | **73** |
| **-10** | **11110110** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 0 1 1 0 0 0 0** | **30** | **0 1 1 1 1 1 1 0** | **7E** |
| **-9** | **11110111** | **BLANK**  **0 0 0 0 0 0 0 0** | **00** | **0 1 1 1 0 1 1 1** | **73** |
| **-8** | **11111000** | **0 1 1 1 1 1 1 1** | **7F** |
| **-7** | **11111001** | **0 1 1 1 0 0 0 0** | **70** |
| **-6** | **11111010** | **0 1 0 1 1 1 1 1** | **5F** |
| **-5** | **11111011** | **0 1 0 1 1 0 1 1** | **5B** |
| **-4** | **11111100** | **0 0 1 1 0 0 1 1** | **33** |
| **-3** | **11111101** | **0 1 1 1 1 0 0 1** | **79** |
| **-2** | **11111110** | **0 1 1 0 1 1 0 1** | **6D** |
| **-1** | **11111111** | **0 0 1 1 0 0 0 0** | **30** |