

```

// Params for width and height
const uint8_t kMatrixWidth = 34;
const uint8_t kMatrixHeight = 36;

#define NUM_LEDS (kMatrixWidth * kMatrixHeight)
CRGB leds[ NUM_LEDS ];
#define LAST_VISIBLE_LED 683
uint16_t XY (uint16_t x, uint16_t y) {
    // any out of bounds address maps to the first hidden pixel
    if ( (x >= kMatrixWidth) || (y >= kMatrixHeight) ) {
        return (LAST_VISIBLE_LED + 1);
    }

    const uint16_t XYTable[] = {
        684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9,
        10, 11, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705,
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        16, 15, 14, 13, 12, 714, 713, 712, 711, 710, 709, 708, 707, 706,
        724, 725, 726, 727, 728, 729, 730, 731, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39,
        40, 41, 42, 43, 44, 45, 732, 733, 734, 735, 736, 737, 738, 739,
        753, 752, 751, 750, 749, 748, 747, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53,
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        754, 755, 756, 757, 758, 759, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79,
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        97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 770, 769, 768, 767, 766,
        776, 777, 778, 779, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126,
        127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 780, 781, 782, 783,
        803, 802, 801, 151, 150, 149, 148, 147, 146, 145, 800, 799, 798, 797, 796, 795, 794, 793,
        792, 791, 790, 789, 788, 787, 144, 143, 142, 141, 140, 139, 138, 786, 785, 784,
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        815, 816, 817, 818, 819, 820, 159, 160, 161, 162, 163, 164, 165, 821, 822, 823,
        841, 840, 181, 180, 179, 178, 177, 176, 175, 174, 839, 838, 837, 836, 835, 834, 833, 832,
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        842, 182, 183, 184, 185, 843, 844, 845, 846, 847, 848, 849, 850, 851, 186, 187, 852, 853,
        188, 189, 854, 855, 856, 857, 858, 859, 860, 861, 862, 190, 191, 192, 193, 863,
        885, 205, 204, 203, 202, 884, 883, 882, 881, 880, 879, 878, 877, 876, 201, 200, 875, 874,
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        933, 934, 935, 936, 937, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255,
    };

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665, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139,
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669, 1155, 1154, 1153, 1152, 668, 667,
666, 1151, 1150, 1149, 1148, 1147, 1146, 1145, 1144, 1143, 1142, 1141, 1140,

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    674,1180,1181,1182,1183, 675, 676,  
    677,1184,1185,1186,1187,1188,1189,1190,1191,1192,1193,1194,1195,  
    1223,1222,1221,1220,1219,1218,1217,1216,1215,1214,1213,1212, 683, 682,  
    681,1211,1210,1209,1208, 680, 679,  
    678,1207,1206,1205,1204,1203,1202,1201,1200,1199,1198,1197,1196  
};
```

```
    uint16_t i = (y * kMatrixWidth) + x;  
    uint16_t j = XYTable[i];  
    return j;  
}
```