* 1. He was using the first 4 digits to look up the row and the last 3 to look up the column
  2. 1001101 1010011 1010101 1010010 1101111 1100011 1101011 1110011: MSURocks

1. MSUsmelledTHEroses2014: 1001101 1010011 1010101 1110011 1101101 1100101 1101100 1101100 1100101 1100100 1010100 1001000 1000101 1110010 1101111 1110011 1100101 1110011 1111011110
   1. A RGB value is a set of numbers in binary that dictate how much red, green and blue should be applied to a specific pixel or area. These different amounts of red, green and blue are combined to produce a final color.
   2. Purple
   3. 512 possible colors
   4. 16777216 possible colors
   5. 65536 possible colors
   6. 224 possible colors
   7. 4194304 possible colors
2. A
   1. See karthik1\_ownimage.xlsx
   2. See karthik1\_ownimage.xlsx
   3. Bitmap storage required:
      1. Bits = 7200
      2. Bytes = 900
   4. See karthik1\_ownimage.xlsx
   5. Assuming 3 bits to represent indices storage required:
      1. Bits = 885
      2. Bytes = 110.625
   6. Assuming each cell = 1 pixel, the resolution is 18x20
   7. 4 bit color depth
   8. Bitmap storage required:
      1. Bits = 5400
      2. Bytes = 675
   9. See karthik1\_ownimage\_mario.xlsx
   10. Using color index, storage required:
       1. Bits = 1592
       2. Bytes = 199
   11. Storage space saved = 476 bytes (3808 bits)
   12. 1010101
       1. Number (85)
       2. ASCII (U)
       3. RGB value (85, 0, 0 or 0, 85, 0 or 0, 0, 85 etc.)
       4. Sample height of sound wave (85)