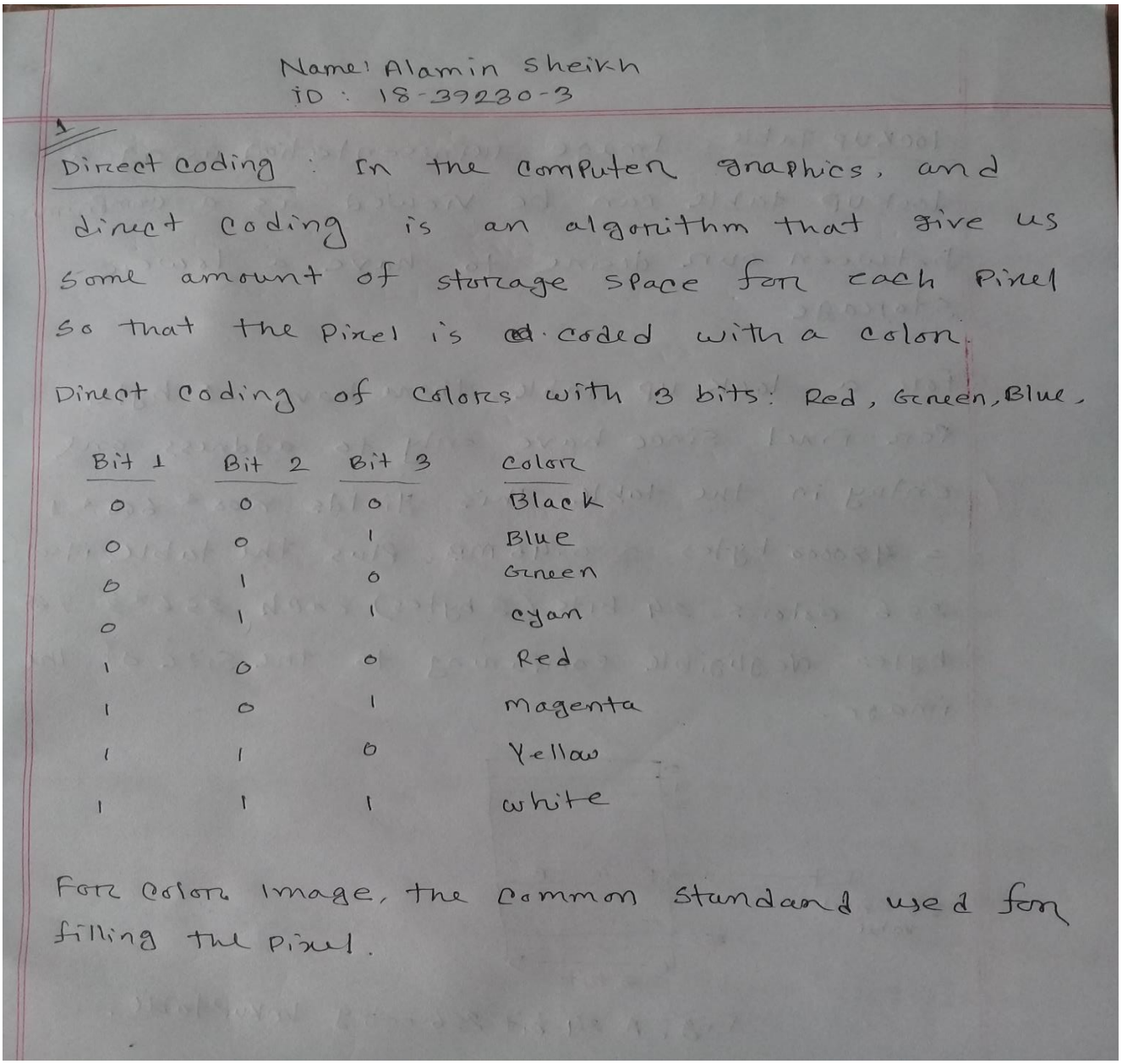
Name: Alamin Sheikh

ID: 18-39230-3

Assignment-1-solution



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1

Direct coding : In the computer graphics, and direct coding is an algorithm that give us some amount of storage space for each Pixel so that the pixel is coded with a color.

Direct coding of colors with 3 bits: Red, Green, Blue.

Bit 1	Bit 2	Bit 3	Color
0	0	0	Black
0	0	1	Blue
0	1	0	Green
0	1	1	cyan
1	0	0	Red
1	0	1	magenta
1	1	0	Yellow
1	1	1	white

For color image, the common standard used for filling the pixel.

Lookup Table: Image representation using a lookup table can be viewed as a compromise between our desire to have a lower storage

For a look-up table, there have 1 byte per pixel since have only to address one entry in the table. This yields 808 * 600 * 1 = 480000 bytes ≃ 0.46 MB. Plus the table itself. 256 colors, 24 bits (3 bytes) each - 256*3 = 768 bytes, negligible comparing to the size of the image.

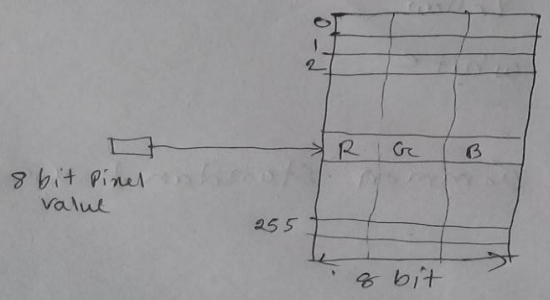

Fig: A 24-bit 256-entry lookup table.

2

A ~~CTR~~CRT monitor contains millions of tiny red, green, and blue phosphor dots that glow when struck by an electron beam that travels across the screen to create a visible image. The illustration bellow shows how this works inside a CRT

there was one the earlier CRT's to Produce color displays. coating Phosphors of different compounds can Produce different colored Picture. But the Basic Problem of graphic is not a color, but to Produce color Picture, with color characteristics chosen at run time.

moniton color display combining the 3 basic - Red, Blue, and Green, can Produce every color. By chooging different ratios of these three colors we can Produce different color, so. one should have a technology to combine them in different combinations.