

Figure - 3

This figure zooms a small region from the sample MRI image of the human brain. This zoomed region would be used for demonstrating the compression system.

5 **Figure - 4**

This figure shows that the image is made up of lot of pixels in grayscale.

Figure - 5

This figure shows a 36-pixel region within the sample MRI image of the human brain.

10 **Figure - 6**

This figure shows the ASCII value equivalent of the image data values, which are originally used for data storage. Each value requires eight bits of data memory or in other words 1 byte of data memory. Currently the 36-pixel region requires about 288 bits or 36 bytes of data memory. It would later be
15 demonstrated that the data could be compressed and stored with only 112 bits.