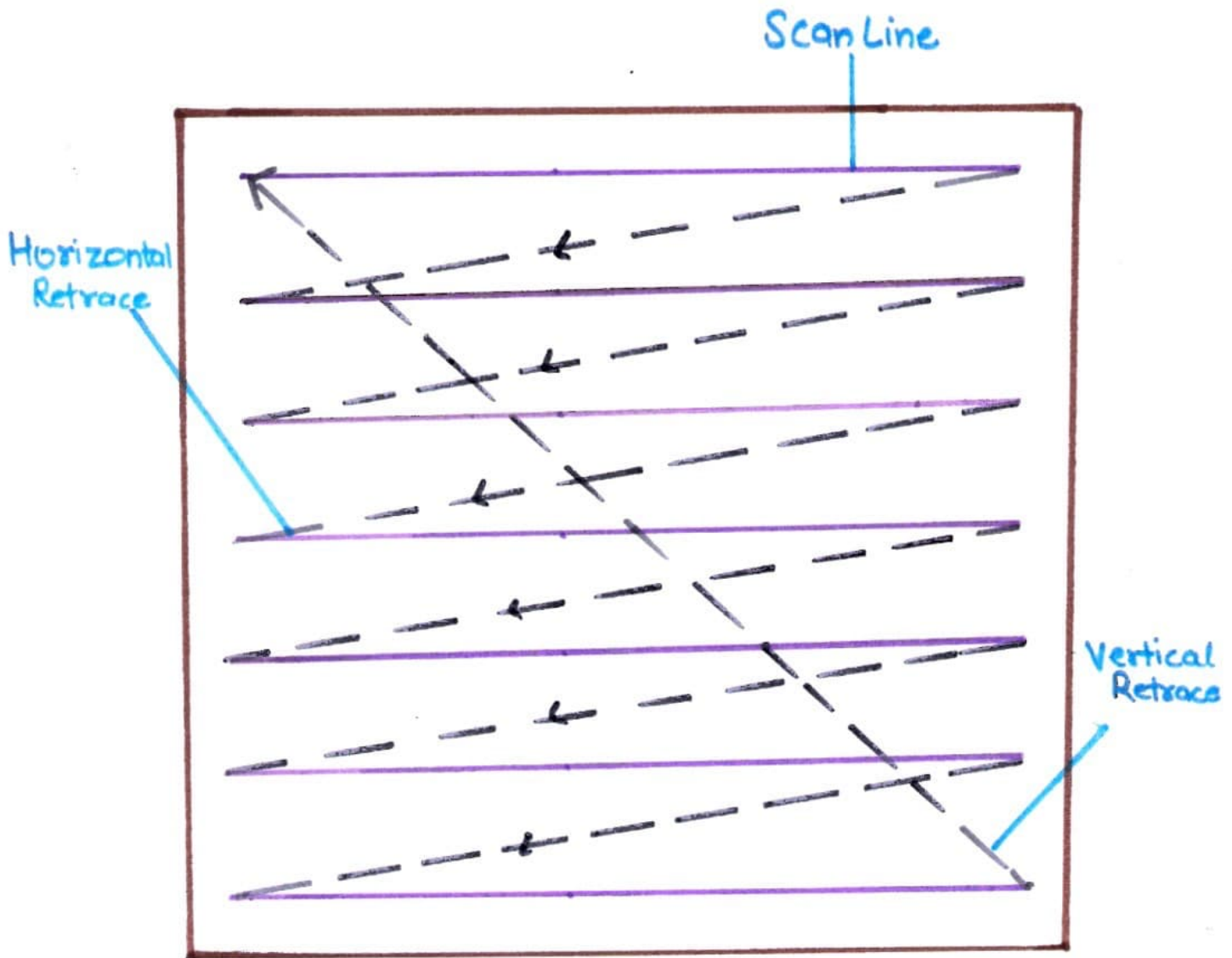


# Raster Scan Display



In this Video Controller reads refresh buffer and produces the actual image.

In this Scanning is done one line at a time, from top to bottom and then back to the top.

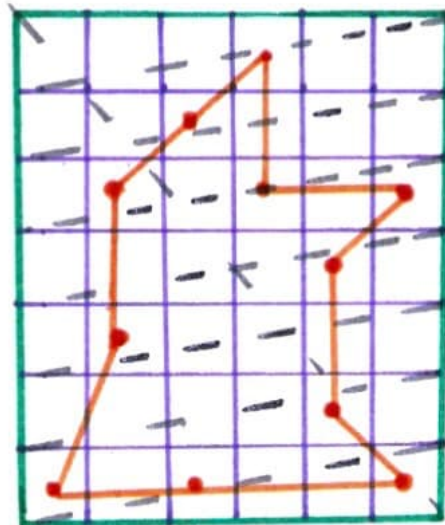
The horizontal and vertical deflection signals are generated to move the beam all over the screen.

When beam moved from left to right, it is ON. and beam is OFF when move from Right to left.

When the beam reaches the bottom of the Screen, it is made OFF and rapidly retraced back to the top left to start again.

Each point on the Screen is called PIXEL. For the black and white system, each pixel can be represented by one bit.

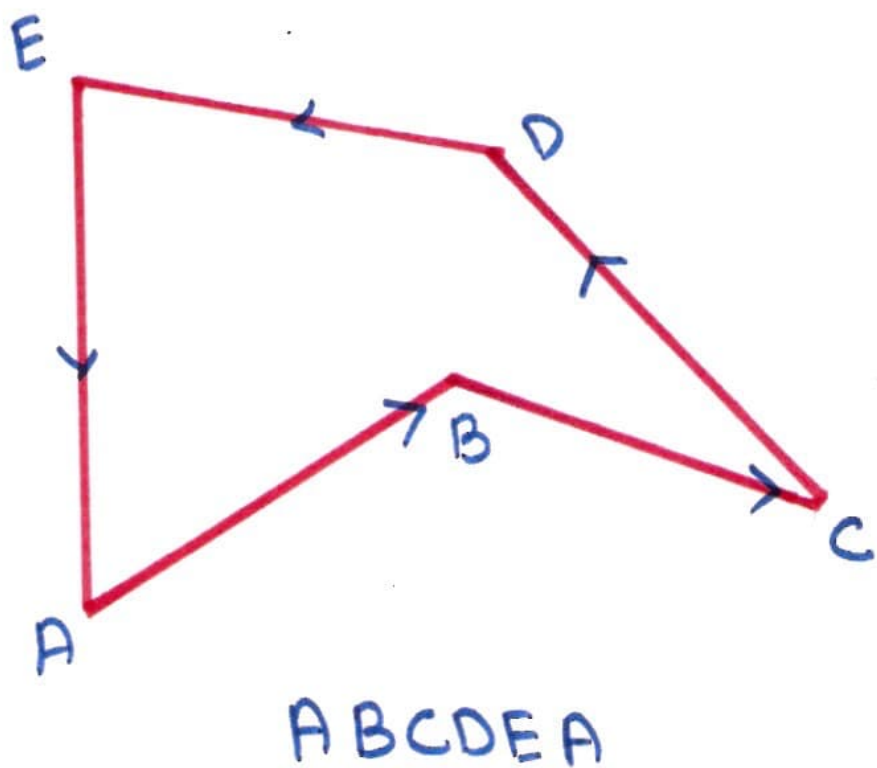
0	0	0	1	0	0
0	0	1	0	0	0
0	1	0	1	0	1
0	0	0	0	1	0
0	1	0	0	0	0
0	0	0	0	1	0
1	0	1	0	0	1



1 for white and 0 for black. In this frame buffer is commonly called a BITMAP

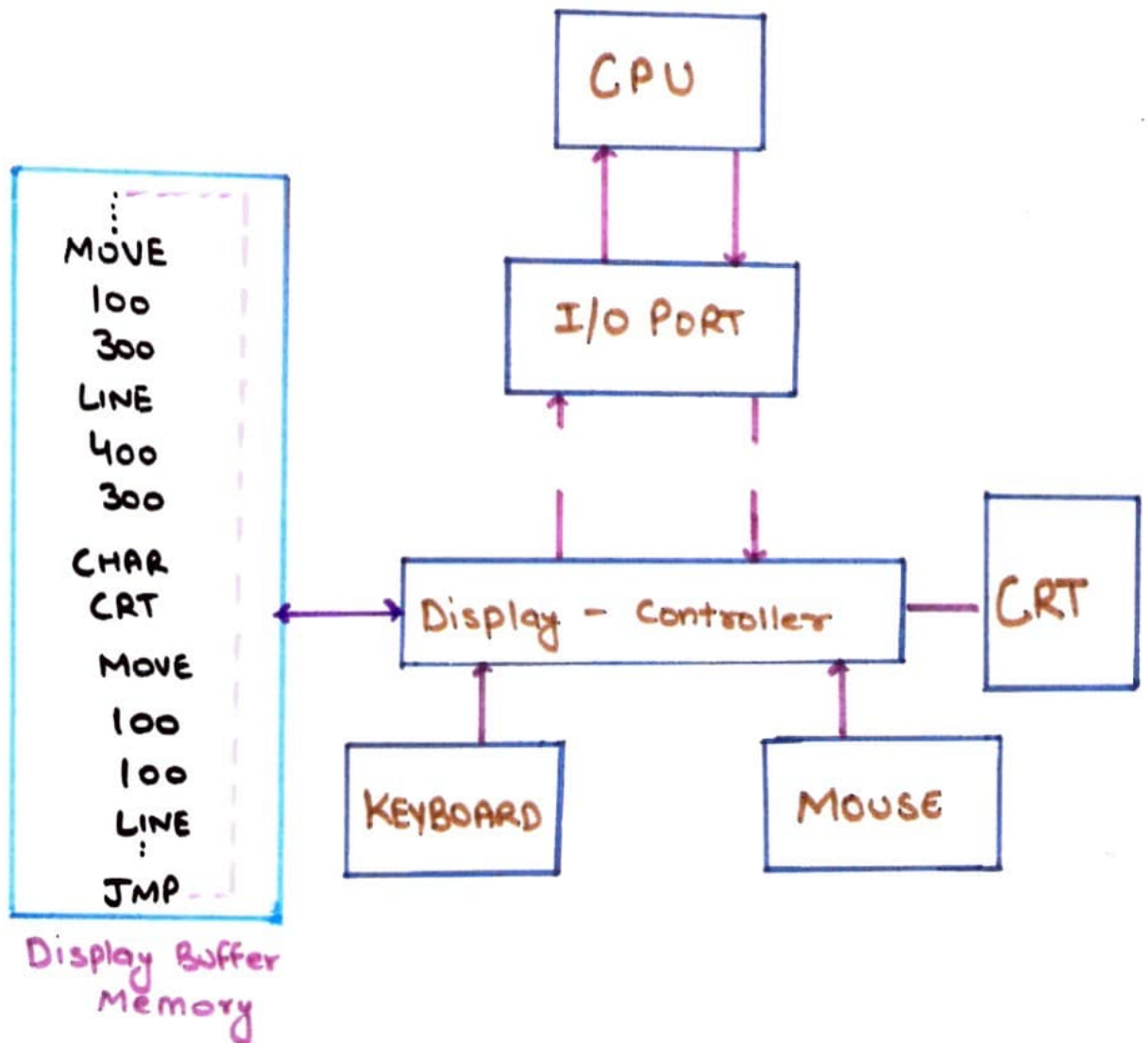
The system with multiple bits per pixel, the frame buffer is referred as PIXMAP.

# Vector Scan / Random Scan Display



- Vector Scan CRT display traces out only the desired lines on CRT.
- Display buffer is used to store display list and it is used for refreshing, the display buffer memory is also called "refresh buffer".
- The process is like the way a person or plotter draws a line.
- This device is capable of producing pictures made up of lines but not of curves.

→ The electron beam was moved along the particular direction and for the particular length of the line specified.



## Architecture of a Vector Display