Vector vs Raster Graphics
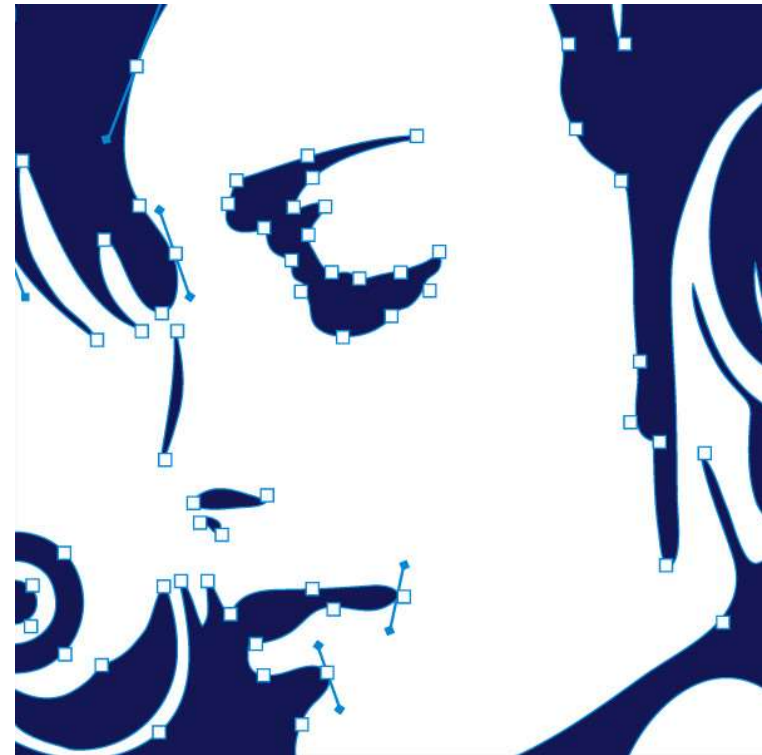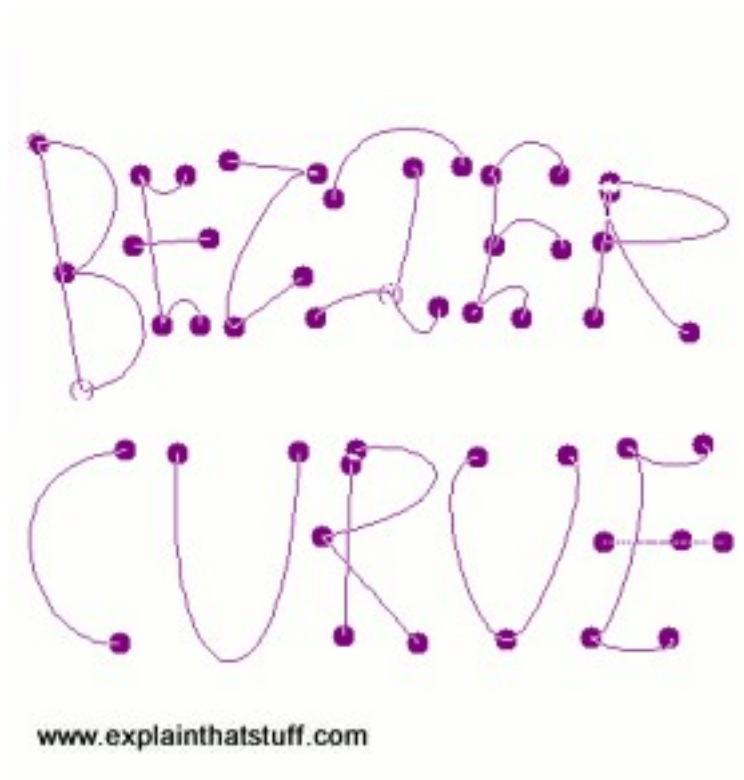

Vector Graphics

Raster Graphics
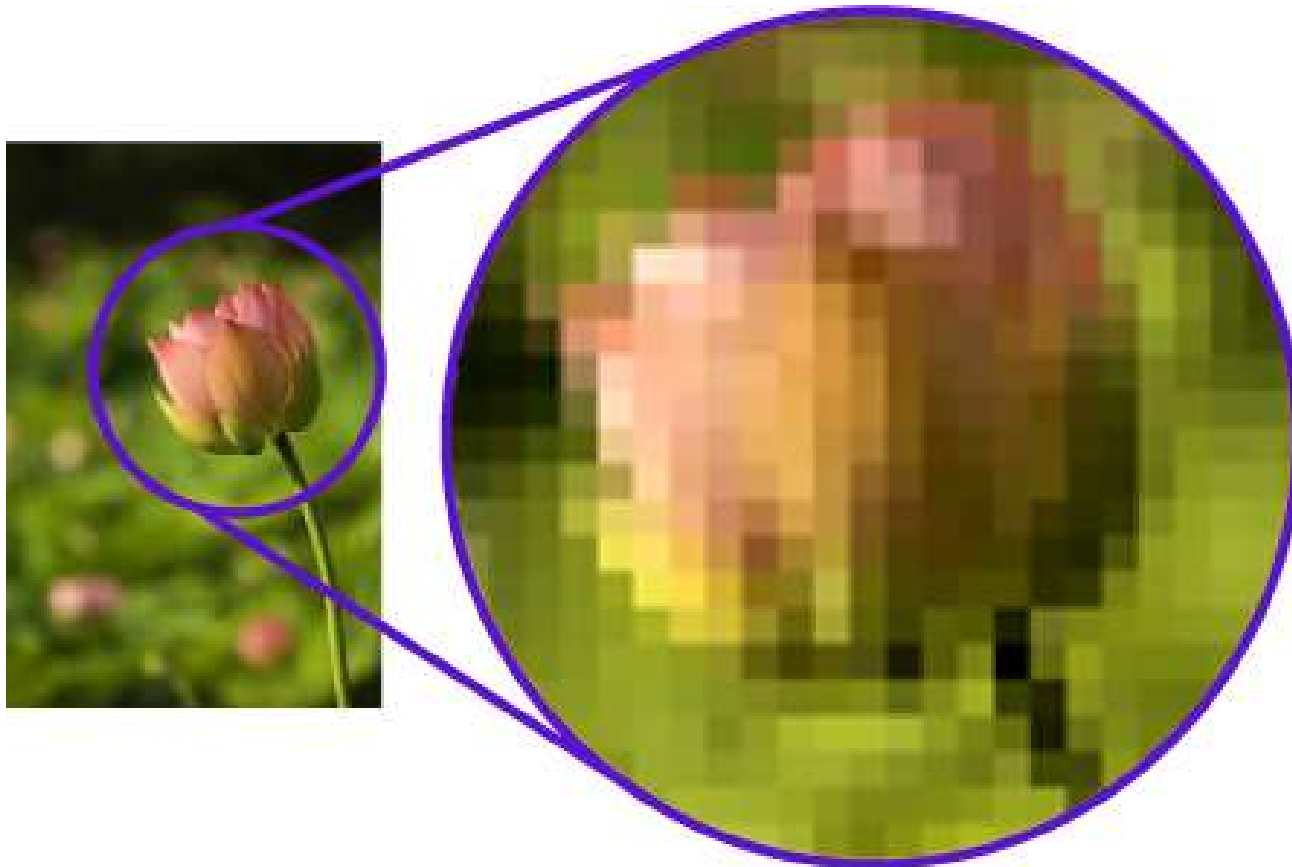
Vector Graphics

= Geometrical (mathematical) representation

Raster Graphics

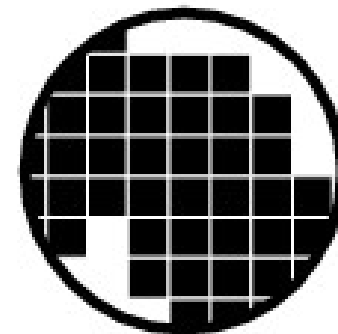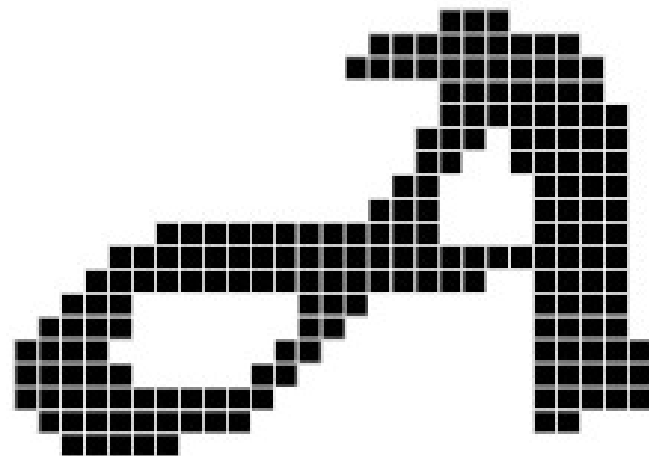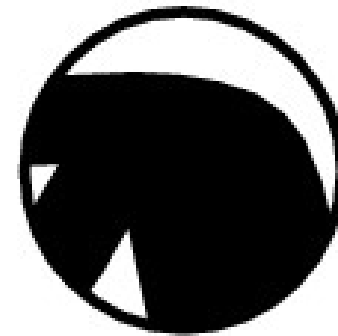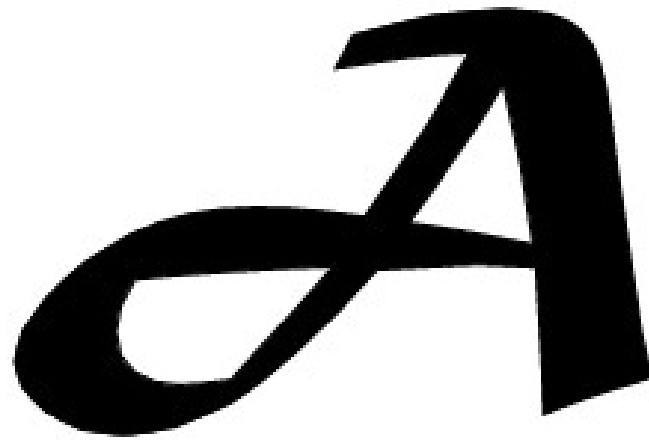= Rectangular grid of colored elements
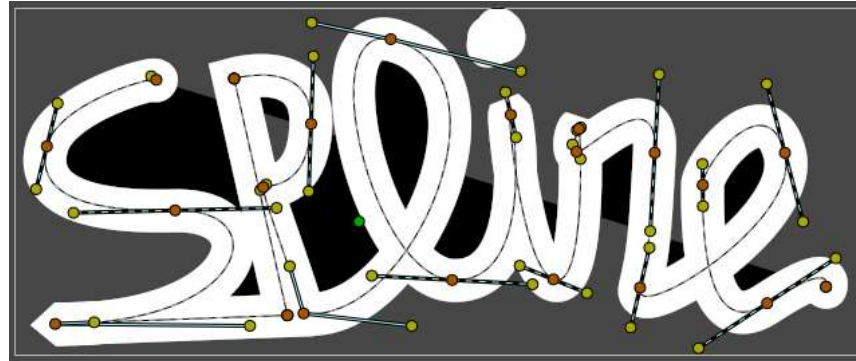
VECTOR vs RASTER

Style

Zoom

Arbitrary Content

- Vector graphics is hard to make
  - General
  - Fast on hardware

- Raster graphics is hard
  - To edit meaningufully
  - To store efficiently
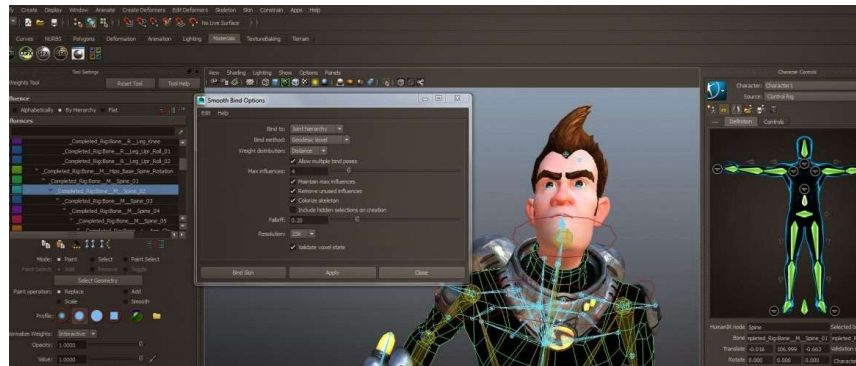
Vector Graphics is used by Software
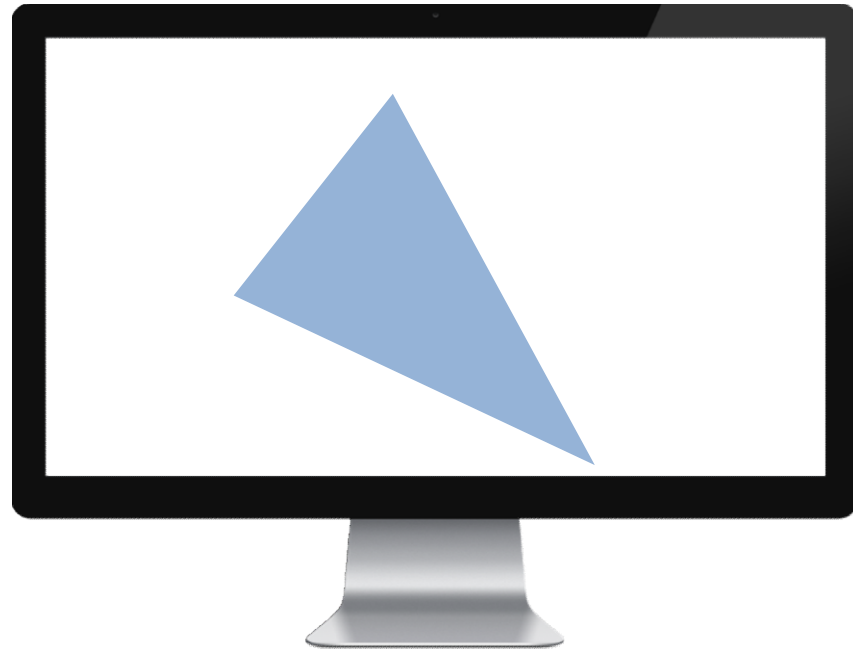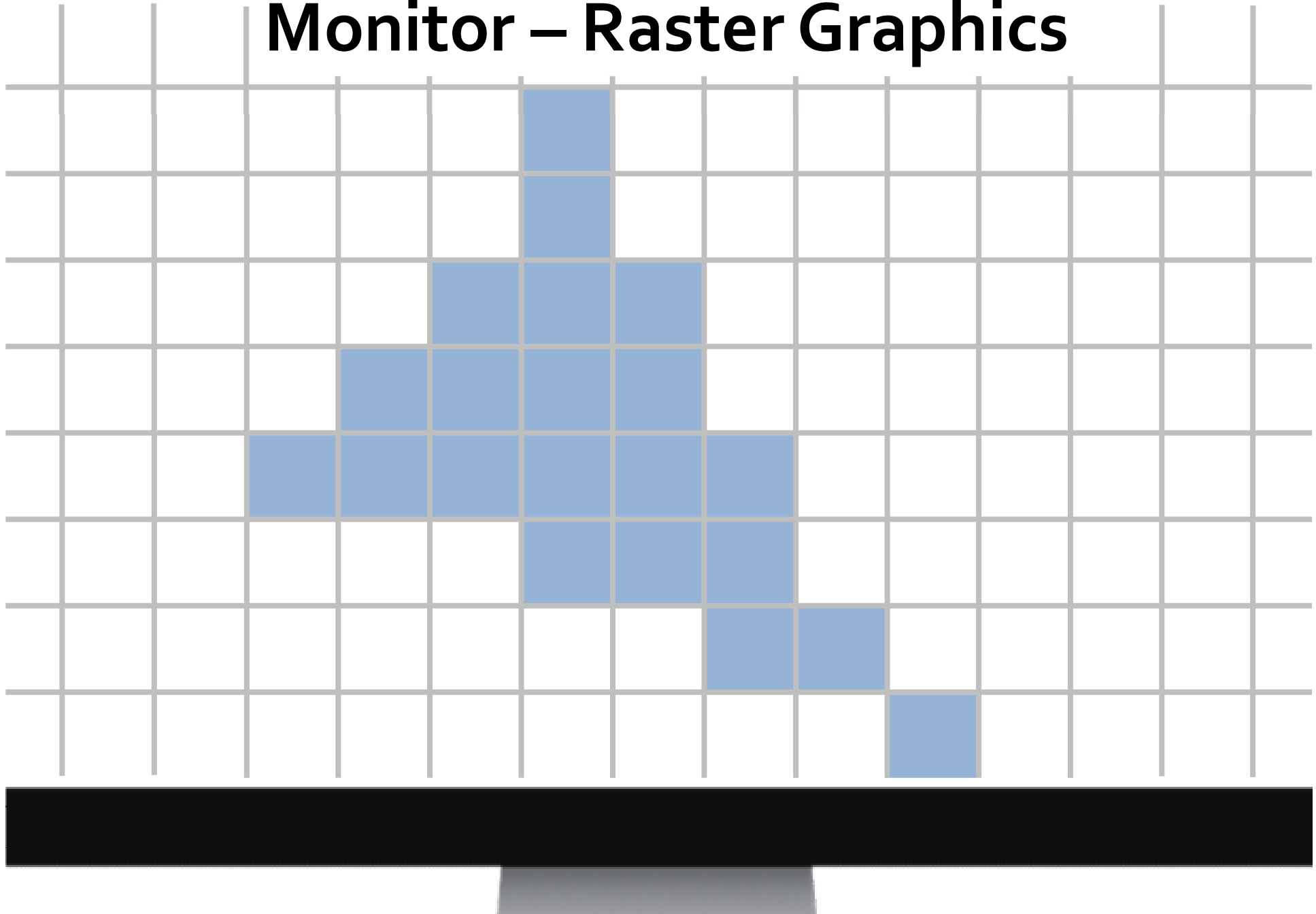
- True Type Fonts

- Illustrator

- Maya

Monitor – Vector or Raster Graphics?
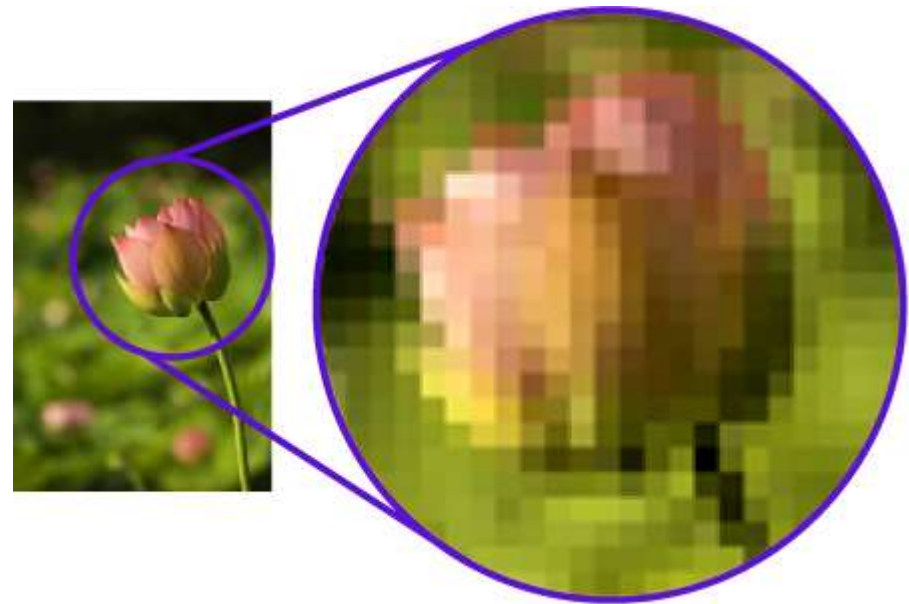
Monitor – Raster Graphics

Raster Graphics is used by Hardware

- Monitor
- Handy
- TV
- Digicam
- Printer
- Scanner
- VR/AR
  - Google Glass
  - Holo Lens
- Mouse
- ...

Why is it used by hardware?

- Easy and cheap to produce

- Very fast

- Arbitrary content

From Software to Hardware

- Conversion from Vector Graphics into Raster Graphics

Rasterisation