INKSCAPE

http://wiki.fablab.is/Inkscape

to change the page size
(document propeties menu)

menu to change line width
(fill and stroke menu)

to change image to nodes
(trace bitmap menu)

selecting & moving
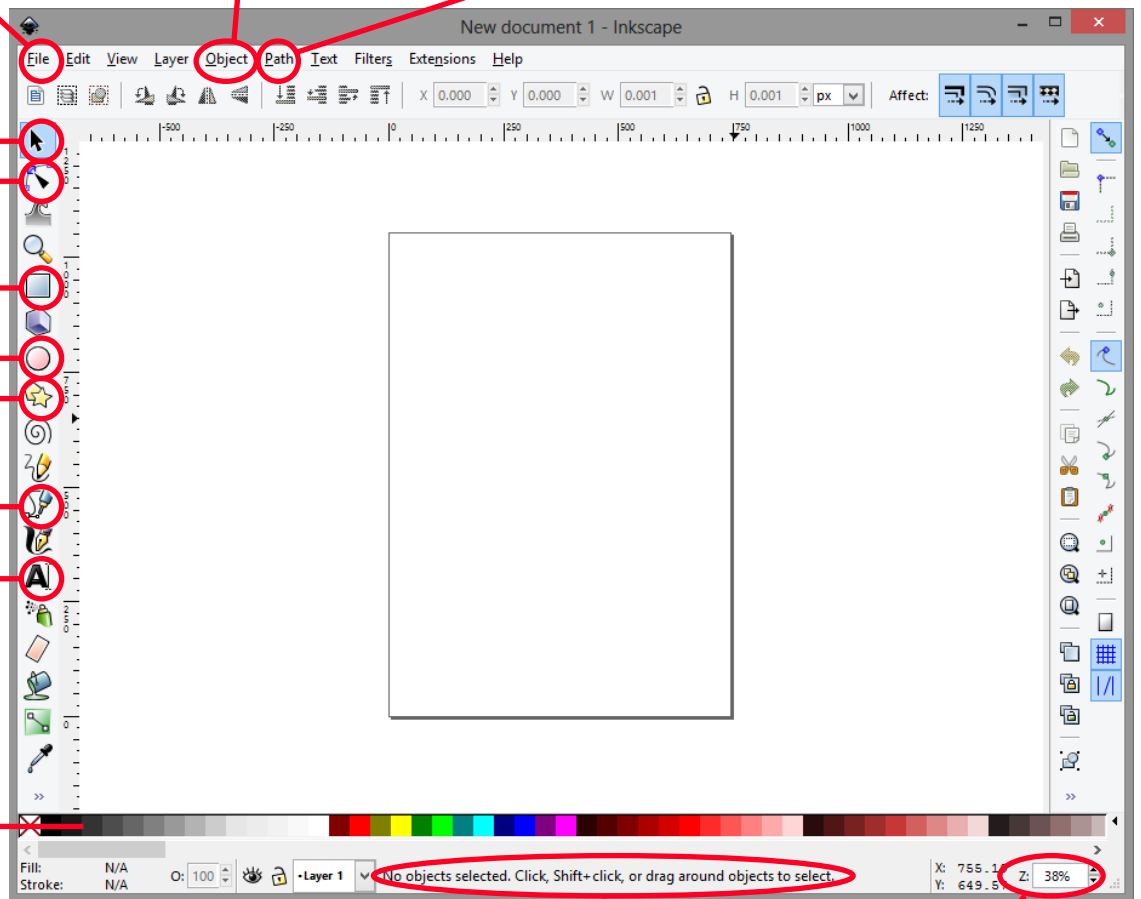
editing nodes

draw a square
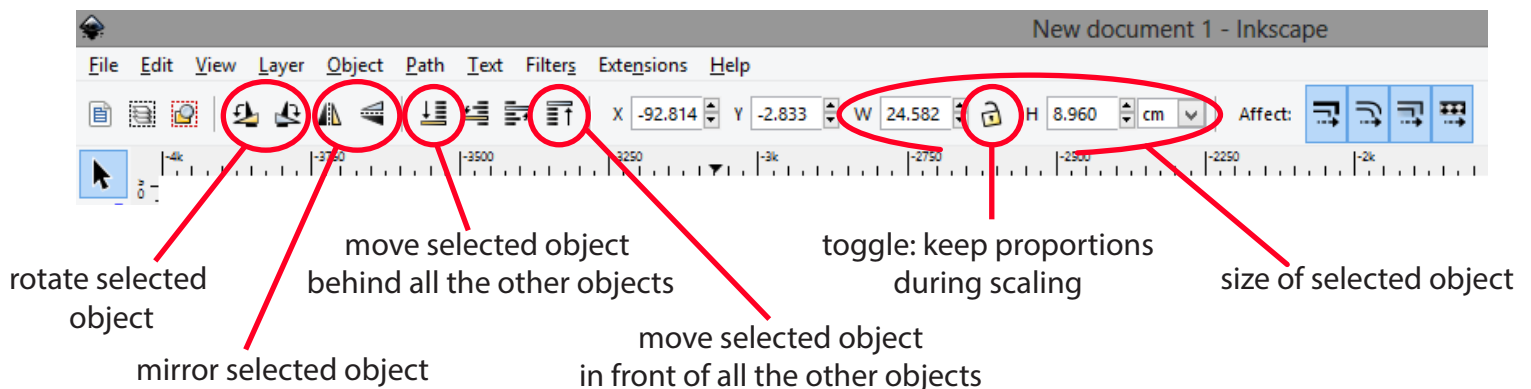
draw a cirkle

draw a star

draw by hand

type text

color picker
(right mouse button)

the program tells you what
you have selected ...

zoom in and out

rotate selected
object

mirror selected object

move selected object
behind all the other objects

move selected object
in front of all the other objects
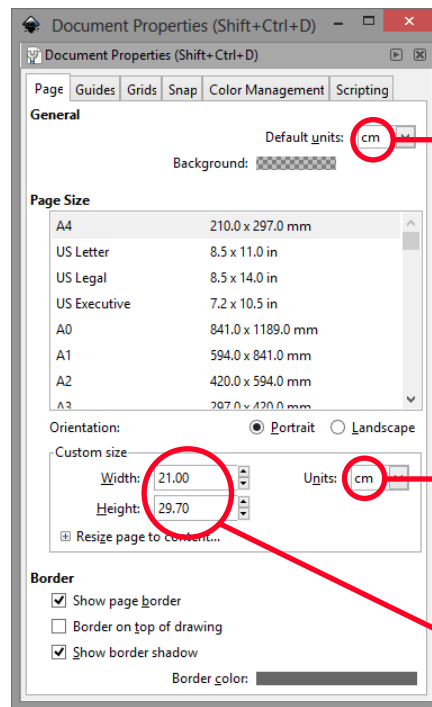
toggle: keep proportions
during scaling

size of selected object

set up the page size :   menu > file > document properties   [shift] + [ctrl] + [D]

lasercutter : 60 x 30 cm
http://wiki.fablab.is/Epilog_Mini_24

vynilcutter : 58 cm wide
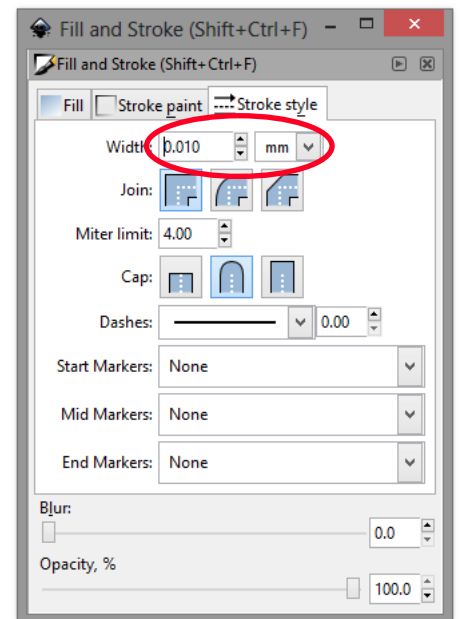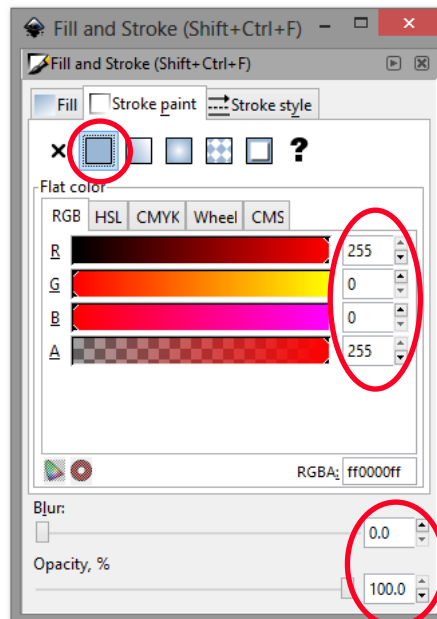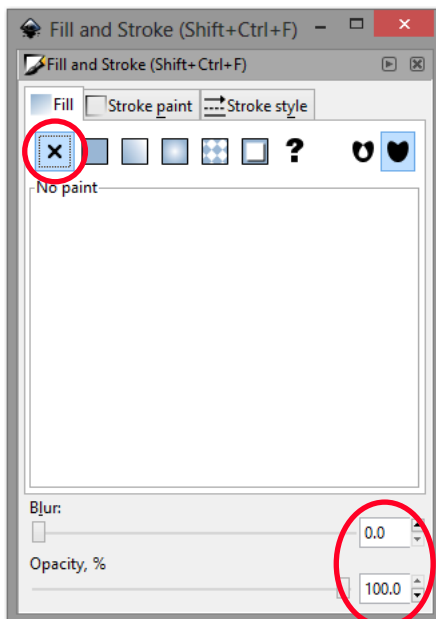http://wiki.fablab.is/Roland_GX-24_CAMM-1

change default units of program

change default units of the page

change page size

to change the fill or stroke of an object :   menu > object > fill and stroke   [shift] + [ctrl] + [F]
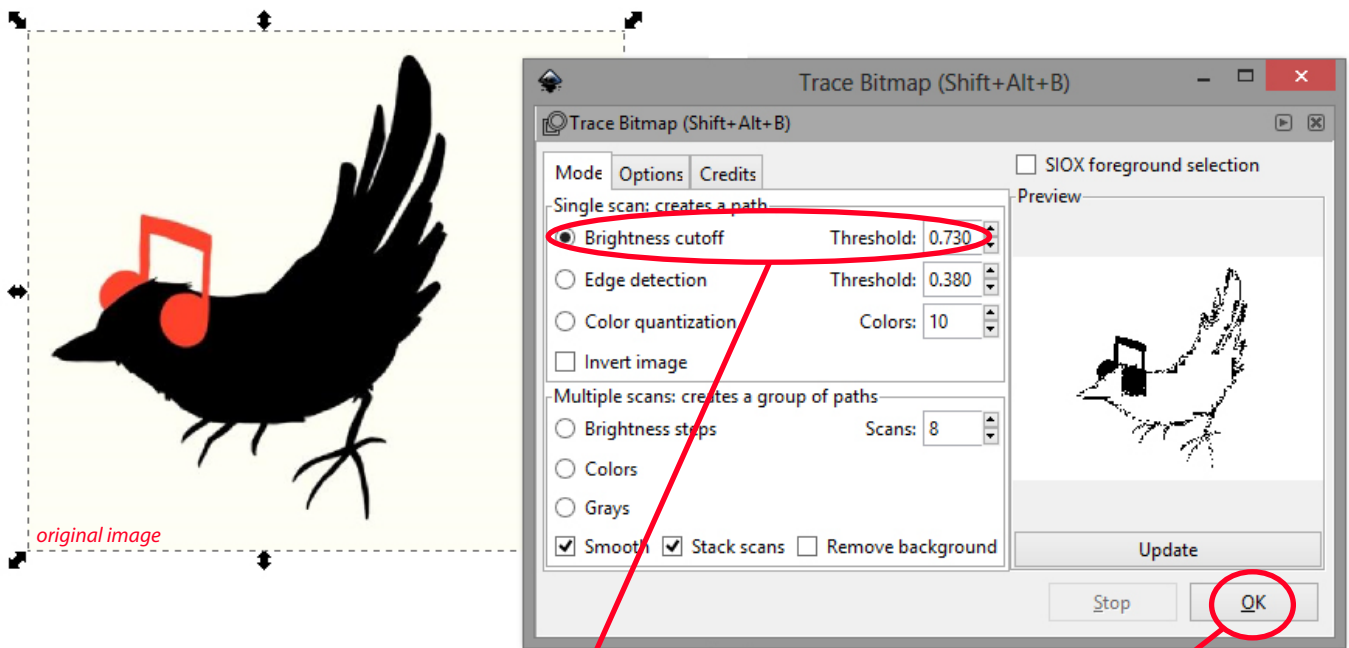

Lasercutting / Vynilcutting :   no fill   > set stroke in red with a linewidth of 0.01 mm.

Laser engraving *(raster)* **:**   no stoke > set fill on black color.
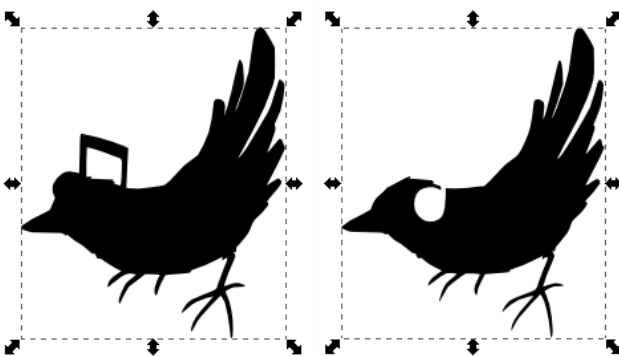
to change image to vectors : menu > path > trace bitmap   [shift] + [alt] + [B]

original image

Trace Bitmap (Shift+Alt+B)

Trace Bitmap (Shift+Alt+B)

Mode | Options | Credits

☐ SIOX foreground selection

Single scan: creates a path
- ⦿ Brightness cutoff   Threshold: 0.730
- ○ Edge detection   Threshold: 0.380
- ○ Color quantization   Colors: 10
- ☐ Invert image

Multiple scans: creates a group of paths
- ○ Brightness steps   Scans: 8
- ○ Colors
- ○ Grays
- ☑ Smooth ☑ Stack scans ☐ Remove background

Preview

Stop   OK   Update
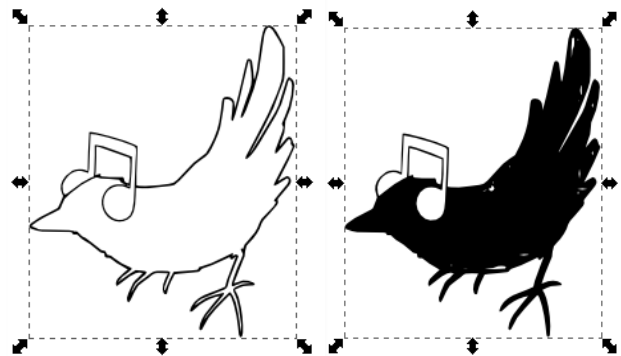
1. select image   **2.** choose setting and change threshold   **3.** apply settings to image

brightness cutoff: one path (silhouette)   **edge detection:** two path's (lined drawing)

to break an object into pieces : menu > path > break apart   [shift] + [ctrl] + [K]

1. select object and choose 'break apart'   **2.** deselect objects   **3.** clean up by using select and [delete]
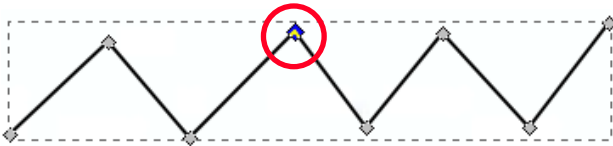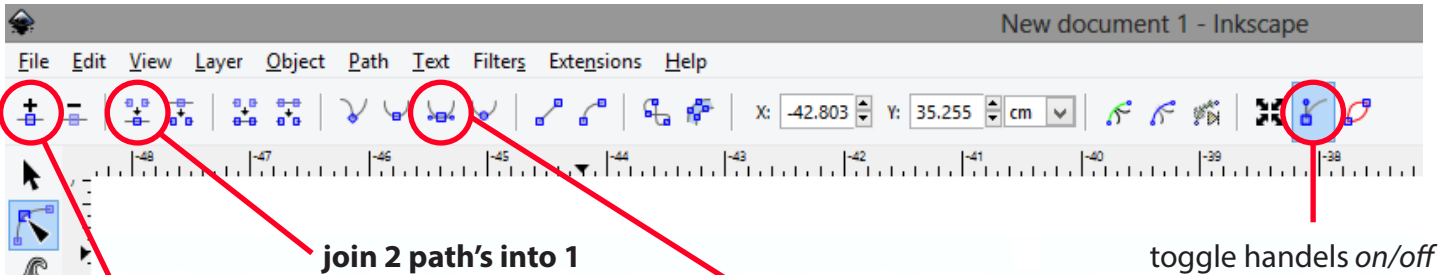
drawing by hand :

1. click on page to start   **2.** move your mouse   **3.** click again   **4.** continue to repeat step 2 & 3.

use [backspace] on the keyboard if you want to undo a step.   use **dubbelclick** to apply drawing to path.

editing nodes :

First click on the path you want to edit,
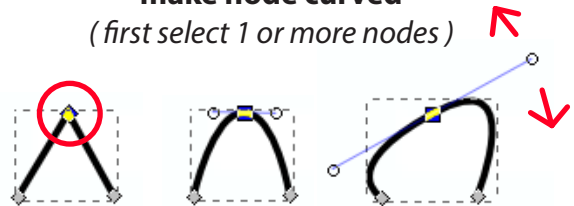then select one or more nodes you want to change.

New document 1 - Inkscape

File Edit View Layer Object Path Text Filters Extensions Help

X: -42.803 Y: 35.255 cm

join 2 path's into 1
(first use [shift] to first select the 2 path's
then drag over the 2 nodes you want to join)

toggle handels *on/off*

add extra node to path
(first select 2 or more nodes)

make node curved
(first select 1 or more nodes)

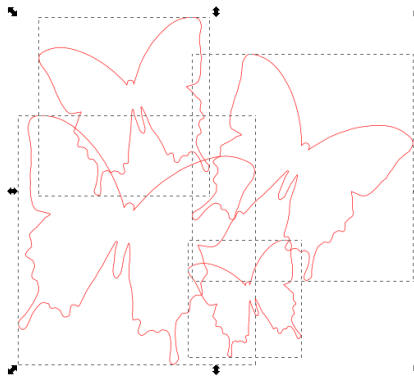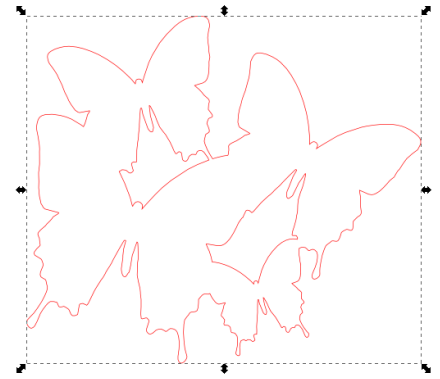**to get less nodes in the whole object** :   menu > path > simplify   [ctrl] + [L]

to join to shapes together : menu > path > union

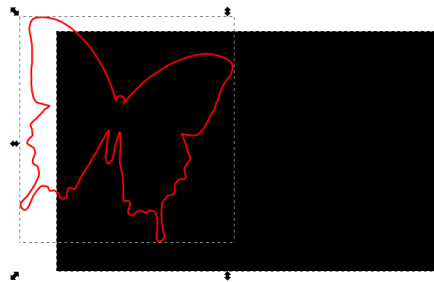**1.** draw multiple shapes   **2.** select two shapes or more   **3.** choose 'union' to join all the shapes

to cut out one shape from the other : menu > path > difference

1. draw multiple shapes   **2.** select two shapes or more   **3.** choose 'difference' to cut the shape

saving as PDF : menu > file > save as ...   [shift] + [ctrl] + [S]