

# Pumping up Productivity in the LAB with Macros One Character at a Time

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@CADProTips



# Pumping up Productivity in the LAB with Macros One Character at a Time

**I would like to Welcome and Introduce my lab assistants**

**Rick Ellis - CADapult Software Solutions, Inc., President**

<http://www.cadapult-software.com/>

**R.K. McSwain - LJA Engineering, Inc., CAD Manager**

<http://cadpanacea.com/>

**Paul Munford - Graitec, Application Engineer**

<http://cadsetterout.com/>

# Class summary

In this class you will gain knowledge to create custom macros that apply to your business needs and enhance your productivity on designs. You will develop a custom tool palette placing all of your new macros on there for quick access.

**Most importantly**, you'll be able to **bring back value** to your employer and the **knowledge to help you excel** within your field.

# Key learning objectives

At the end of this class, you will be able to:

- Identify, change and create macros.
- Create a tool palette with custom macros enabled.
- Use the action recorder to create macros.
- Use macros to automate multiple tasks



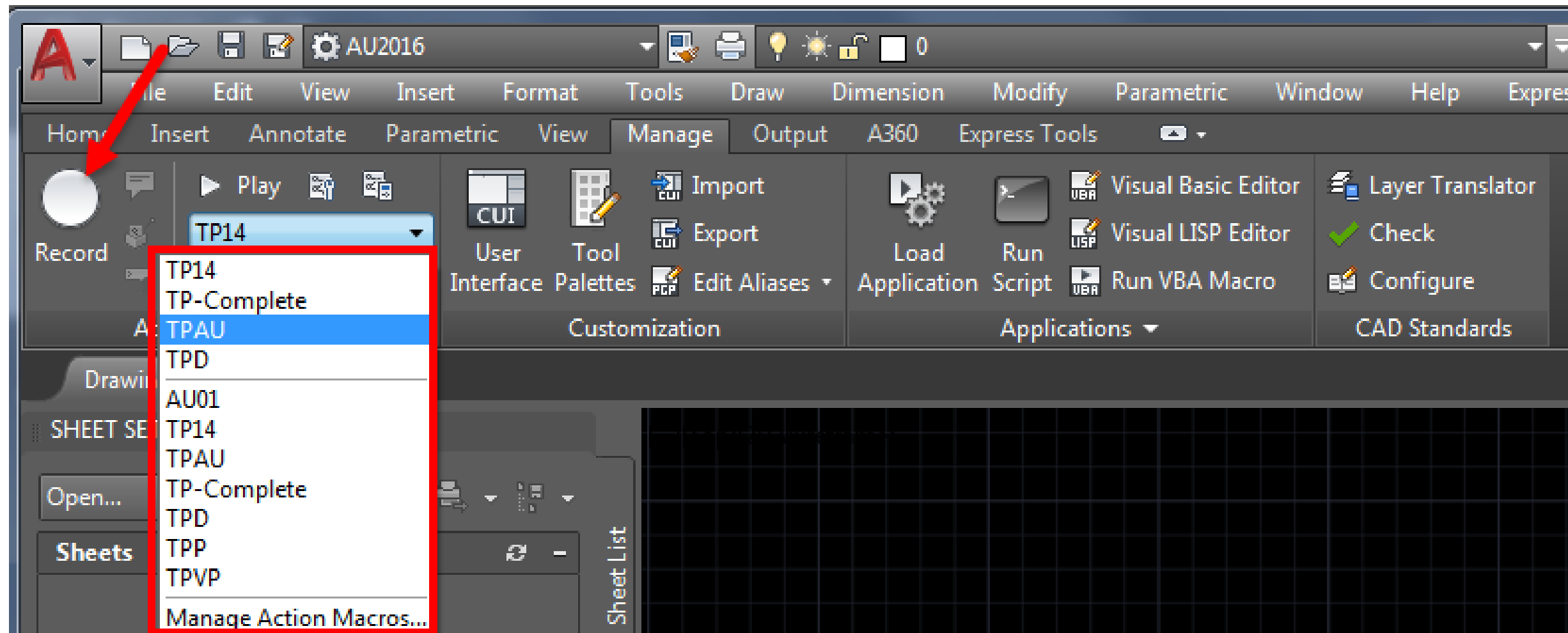
# What is a Macro

In AutoCAD macros can be shortcuts to a series of commands to help make the process of design more efficient.

nively large quantities or on a large scale    b : of or relating to macro-  
economics    3 : GROSS lc  
<sup>2</sup>macro *n. pl macros* [short for *macroinstruction*] (1959) : a single com-  
puter instruction that stands for a sequence of operations  
mac·ro·ag·gre·gate \,mak-rō-'ag-rī-gət\ *n* (1926) : a relatively large par-  
ticle (as of soil or a protein) — mac·ro·ag·gre·gat·ed \-,gāt-əd\ *adj*  
mac·ro·bi·ot·ic \-bī-'āt-ik, -bē-\ *adj* (1965) : of, relating to, or being an  
extremely restricted diet (as one containing chiefly whole grains) that is

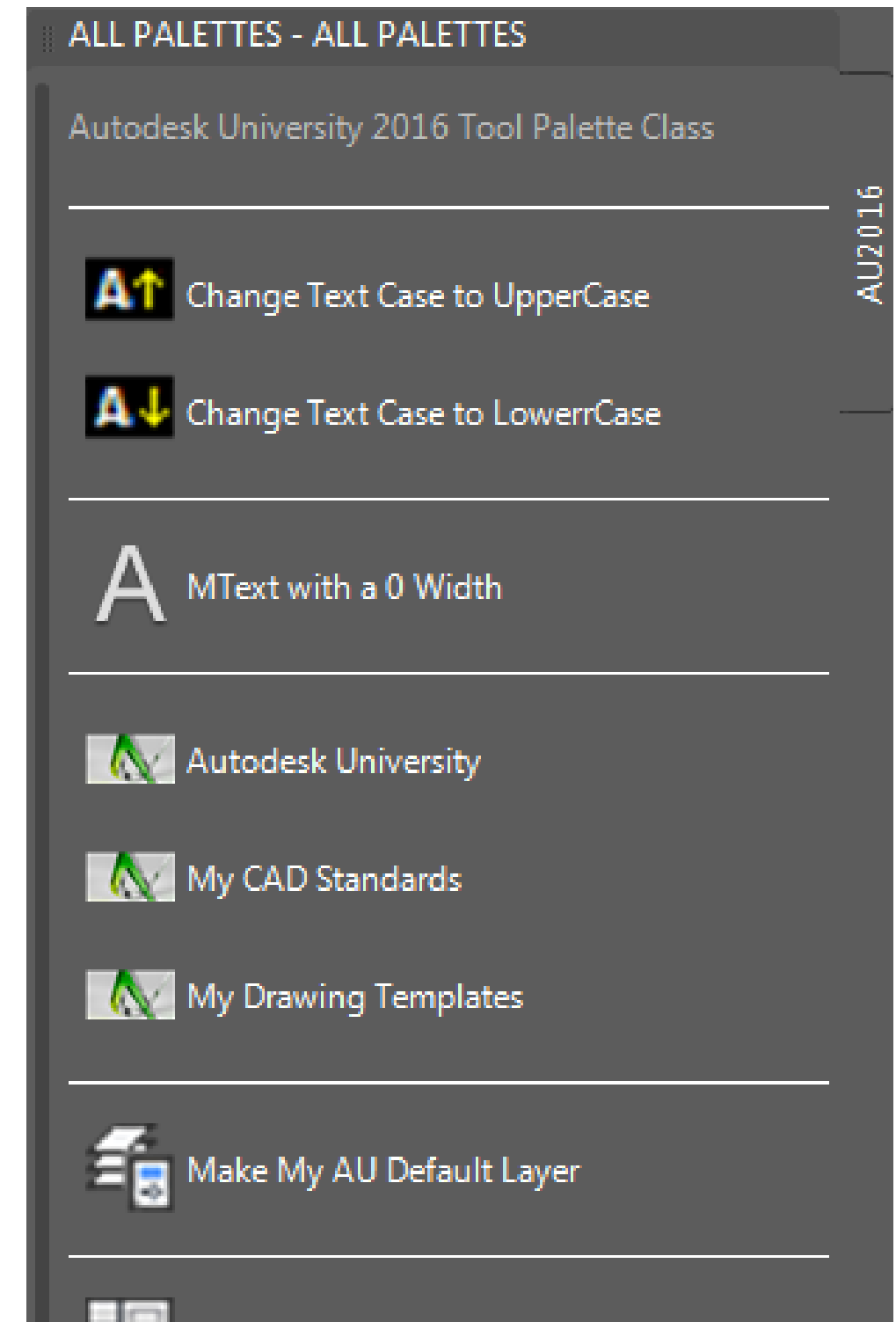
# The Action Recorder

The action recorder is simply a tool to record macros for later use. AutoCAD will read the commands you input then save as a macro



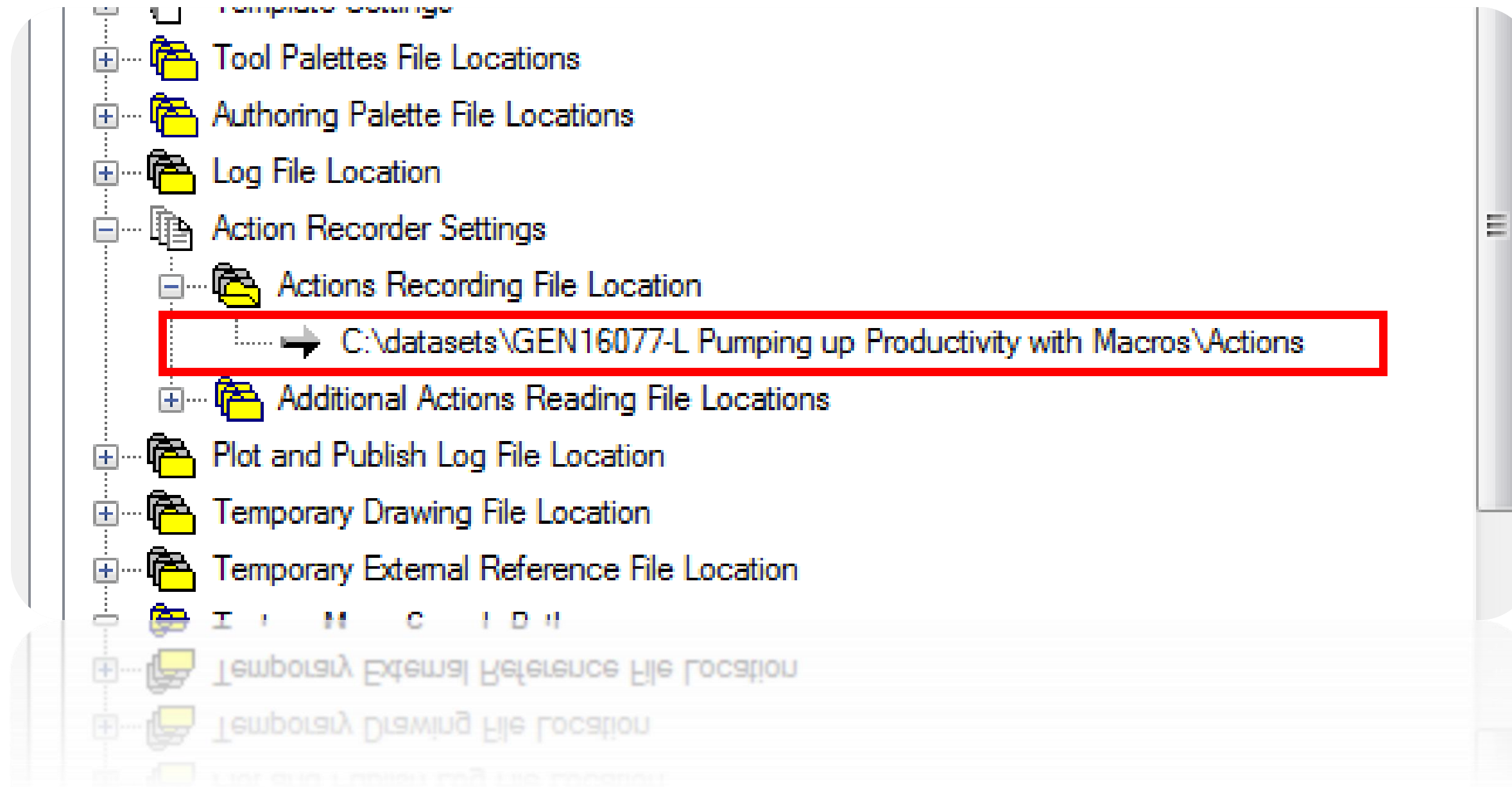
# Tool Palettes

Tool Palettes provide one of the quickest way to increase productivity without programming. A tool palette is a free-floating tab that you can bring up on screen and keep active while you work in your drawing, so you have quick access to common symbols, commands, and most any other tool you need to complete the design. Adding macros to palettes can increase productivity.



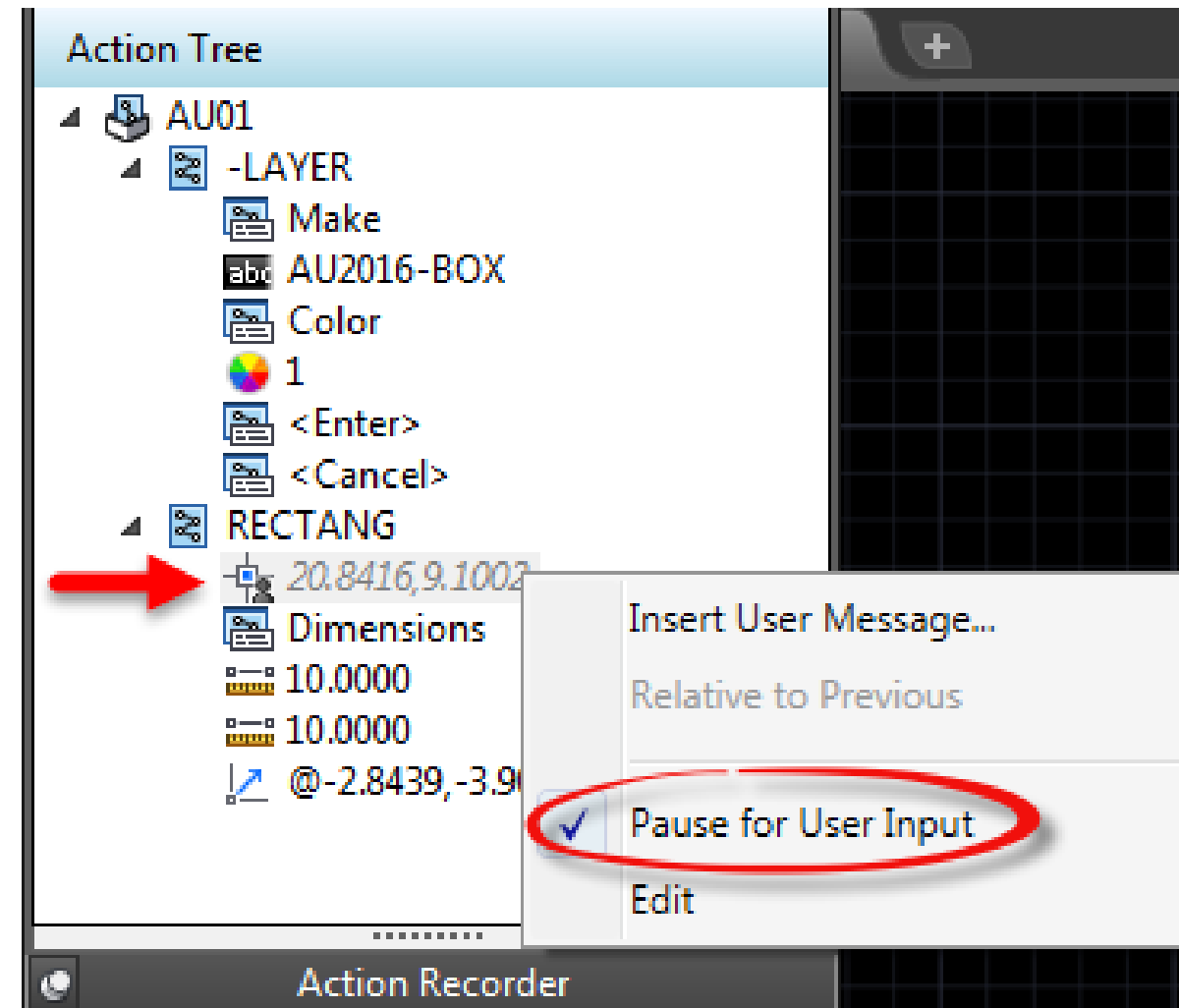
# Exercise 1

## Setting your Action Recorder Path in AutoCAD



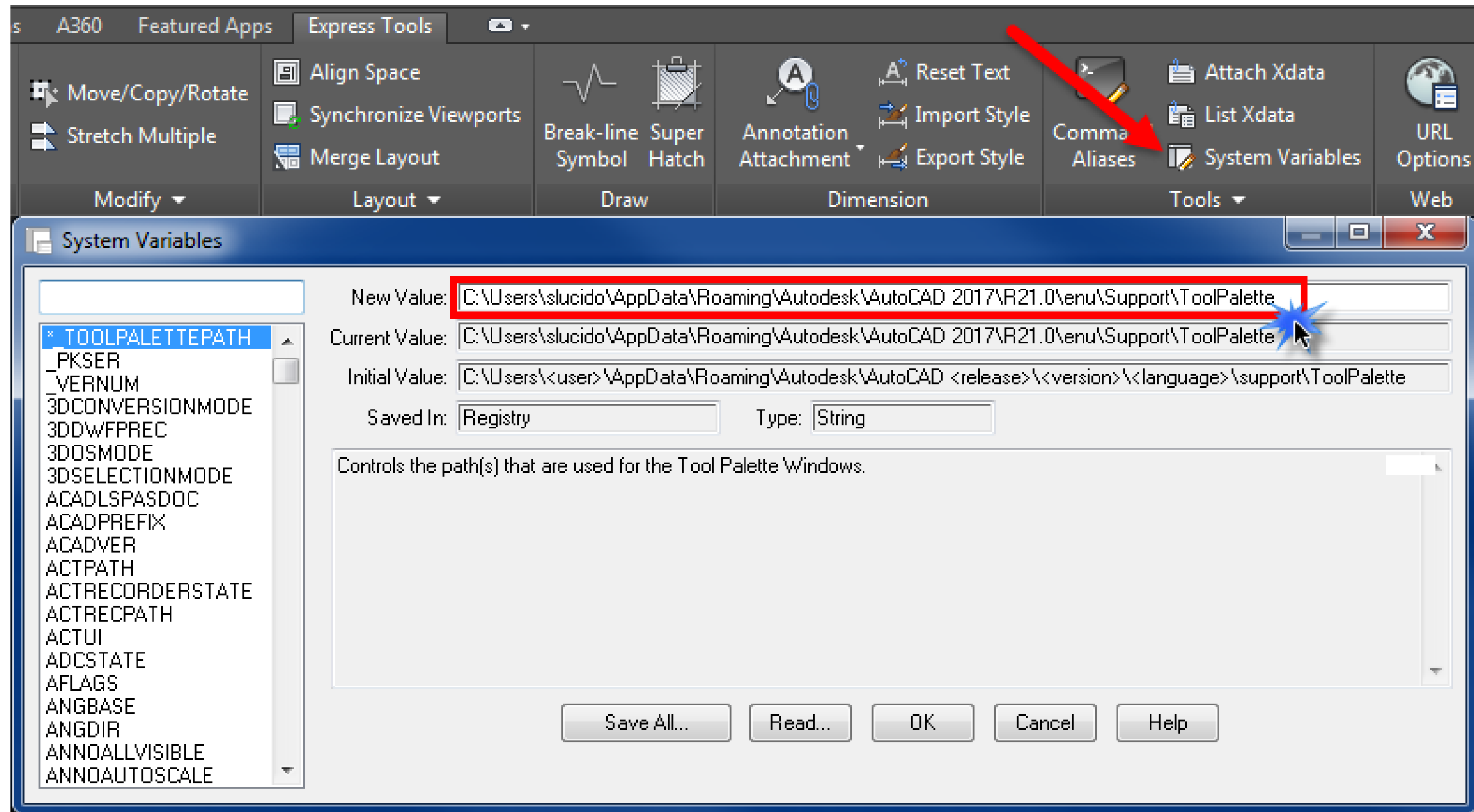
# Exercise 2

## Drawing a 10 x 10 Box with the Action Recorder



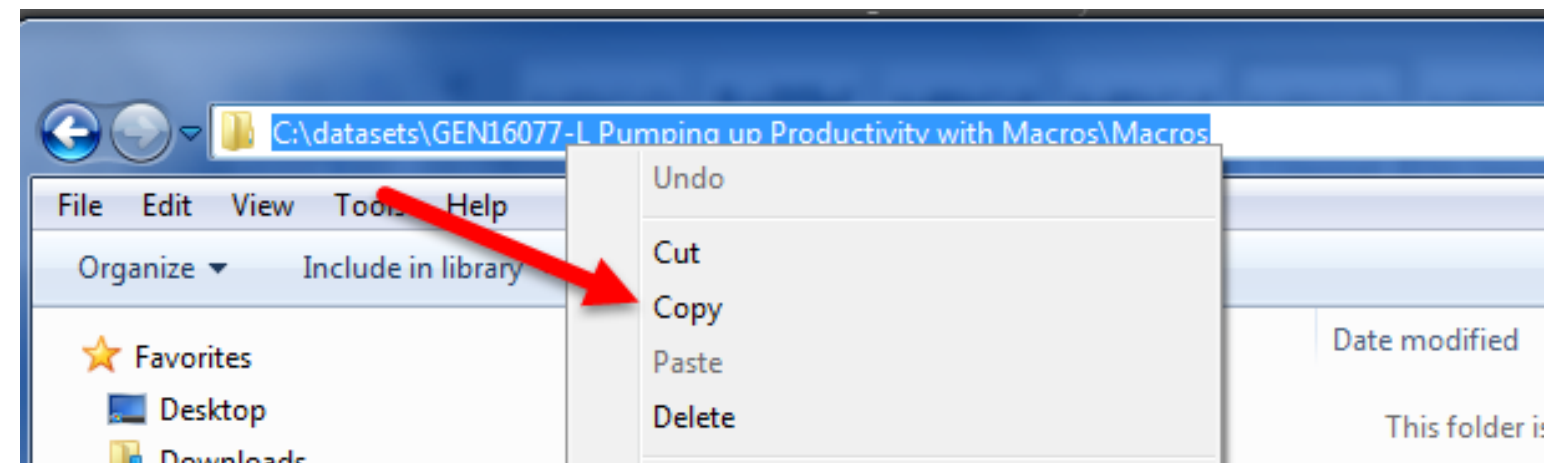
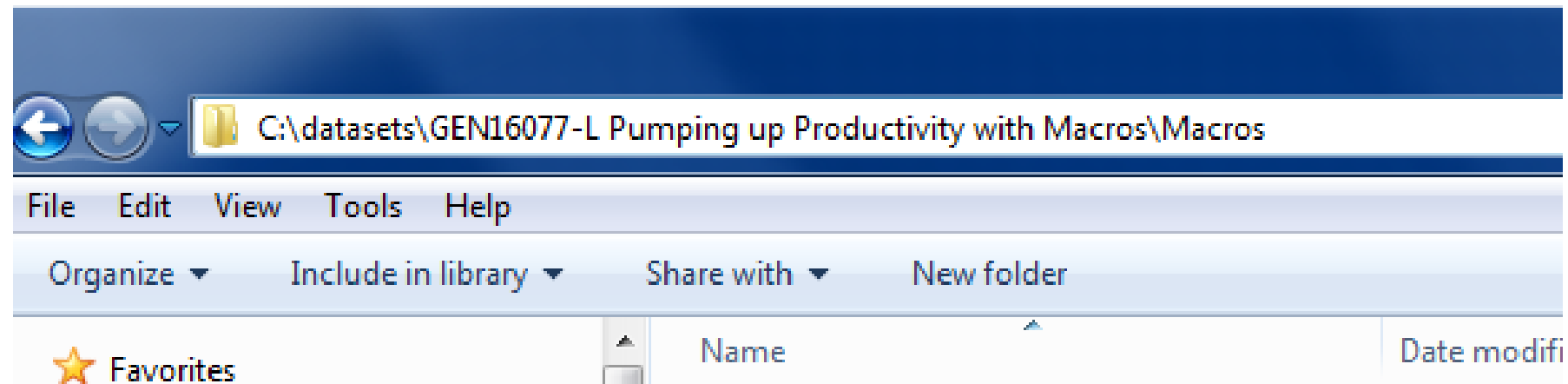
# Exercise 3

## Modifying the Tool Palette Path with a Macro



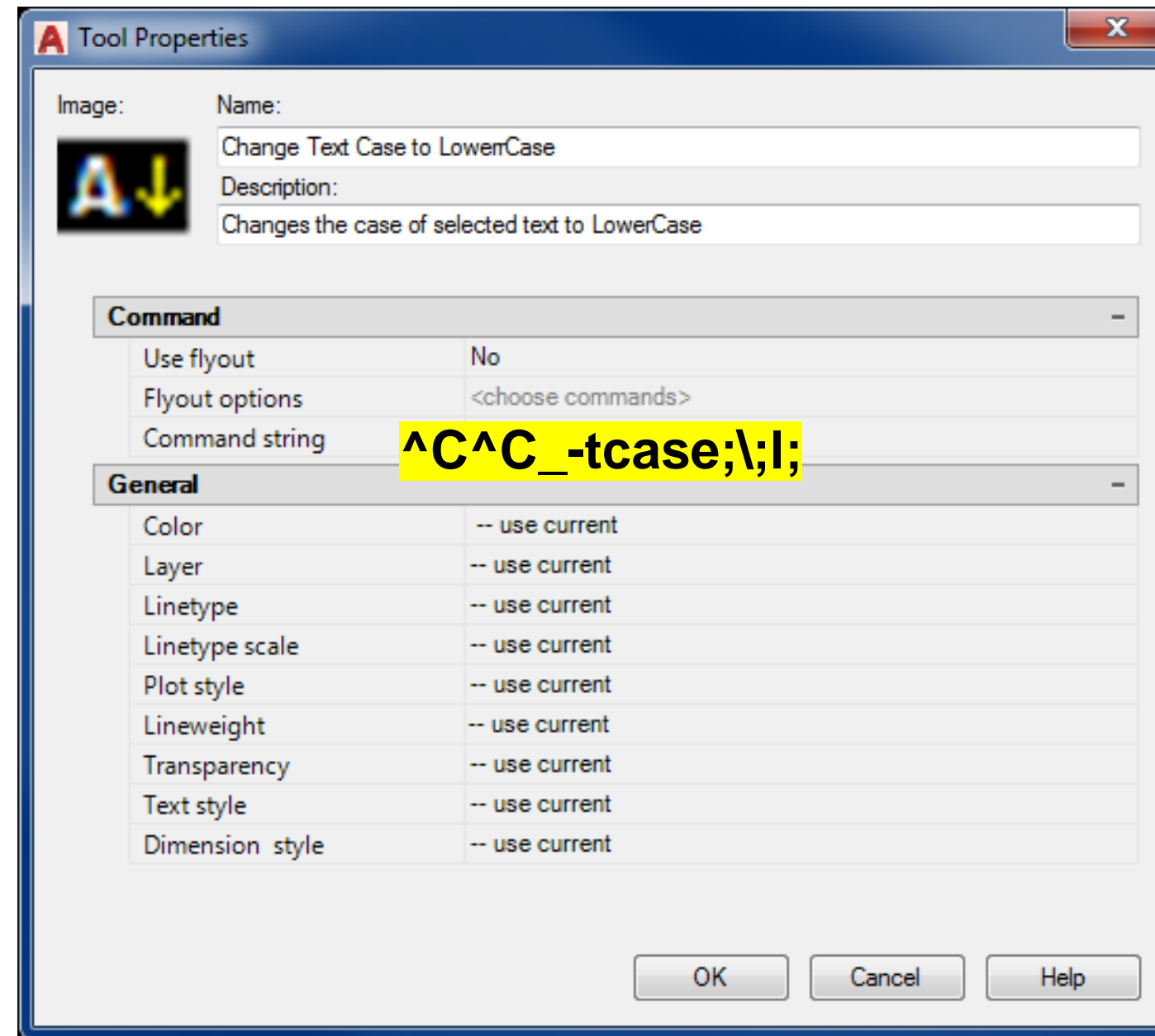
# Exercise 4

## Setting up your blank AU palette with the Action Recorder



# Exercise 5


## Creating a Macro to Change Text Case



# Exercise 6

## Quick Mtext

**Tool Properties**

Image:  Name: MText with a 0 Width  
Description: Quick Multiline Text

**Command**

Use flyout	No
Flyout options	<choose commands>
Command string	<b>^C^C_mtext;\w;0;</b>

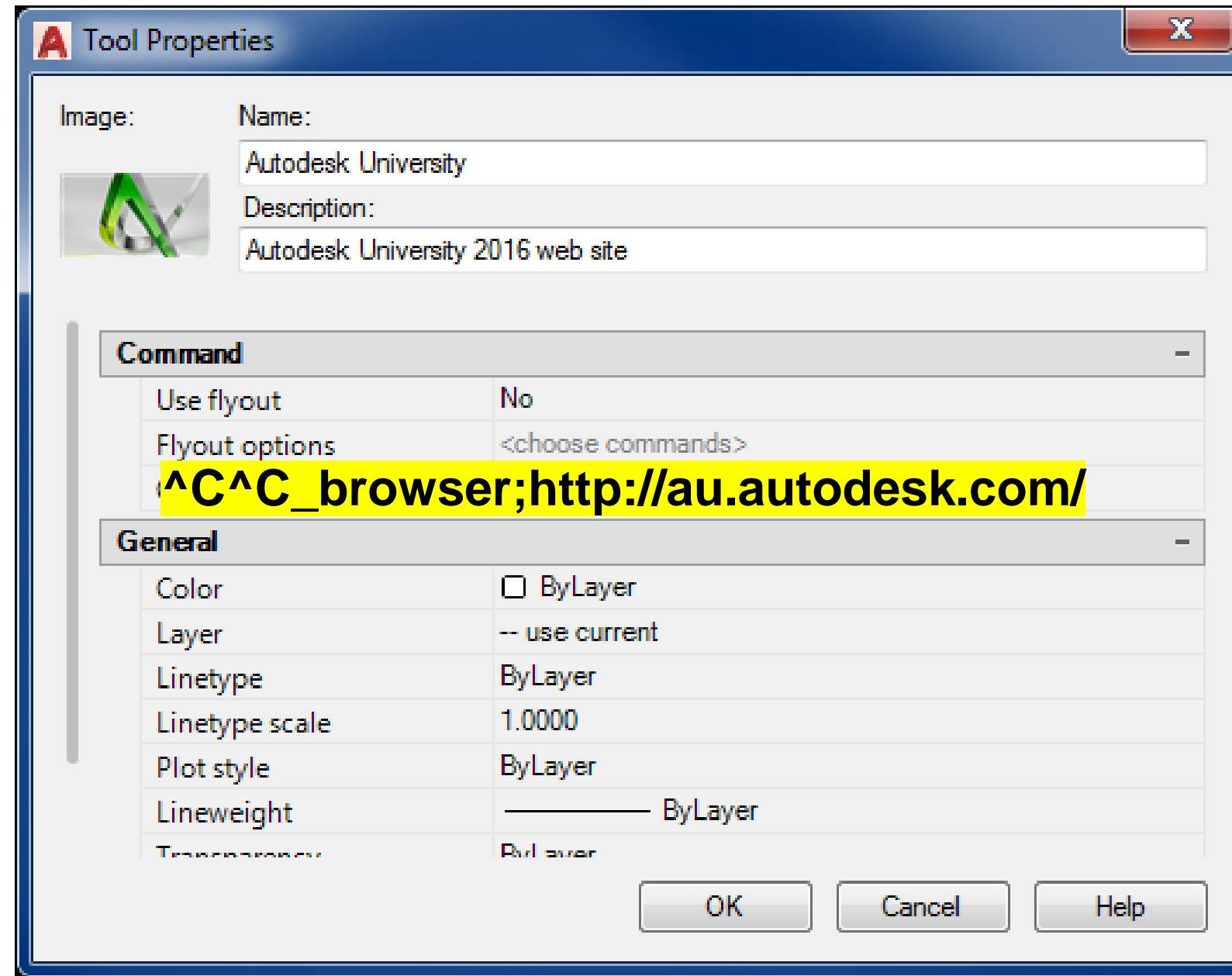
**General**

Color	<input type="checkbox"/> ByLayer
Layer	Text
Linetype	ByLayer
Linetype scale	1.0000
Plot style	ByLayer
Lineweight	———— ByLayer
Transparency	ByLayer

OK Cancel Help

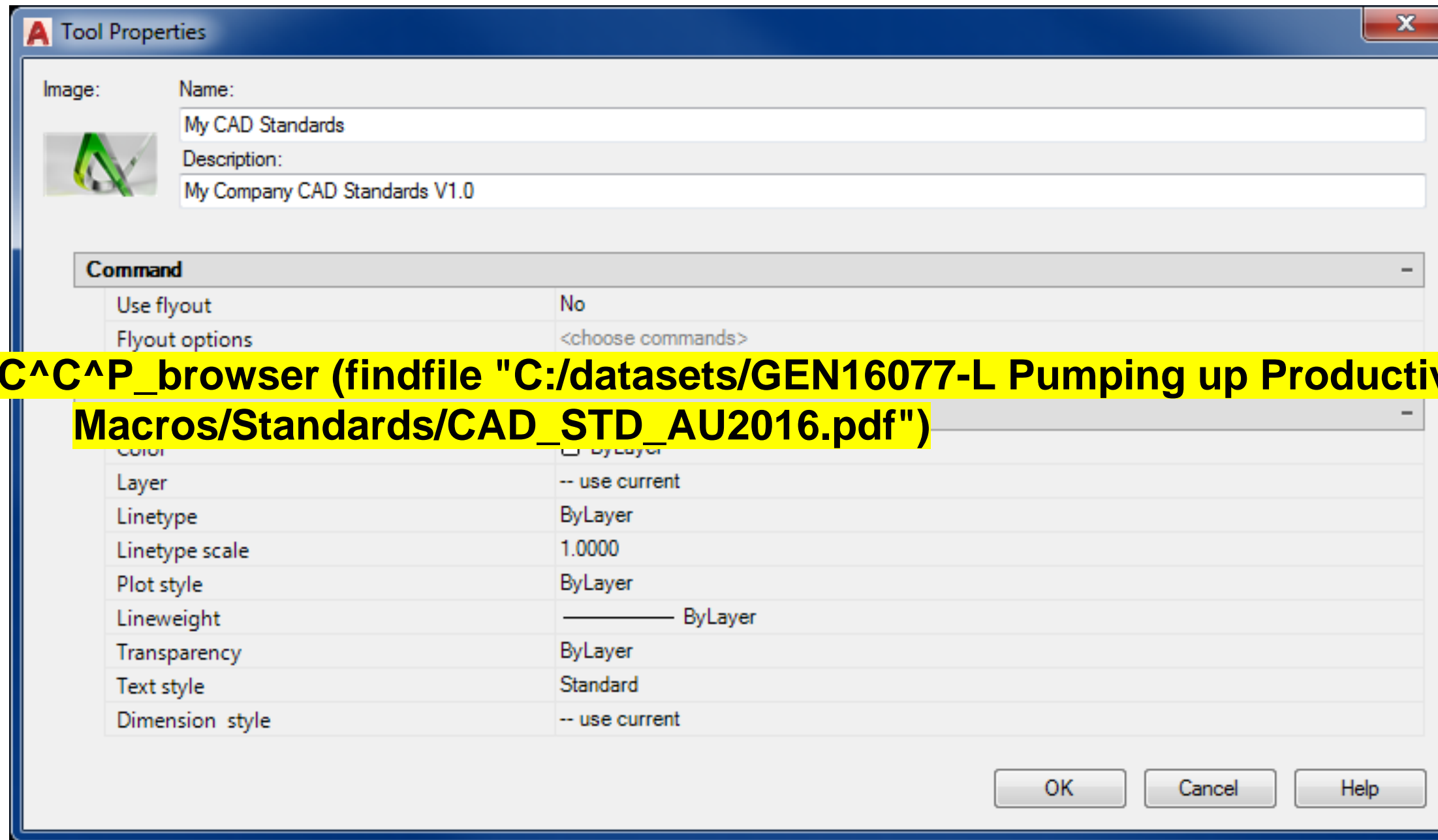
# Exercise 7

## Open up a Web Page with a Macro



# Exercise 8-1


## Open up a PDF file with a Macro



# Exercise 8-2

## Open up a Template with a Macro

**Tool Properties**

Image: 

Name: My Drawing Templates

Description: My Standard Drawing Templates

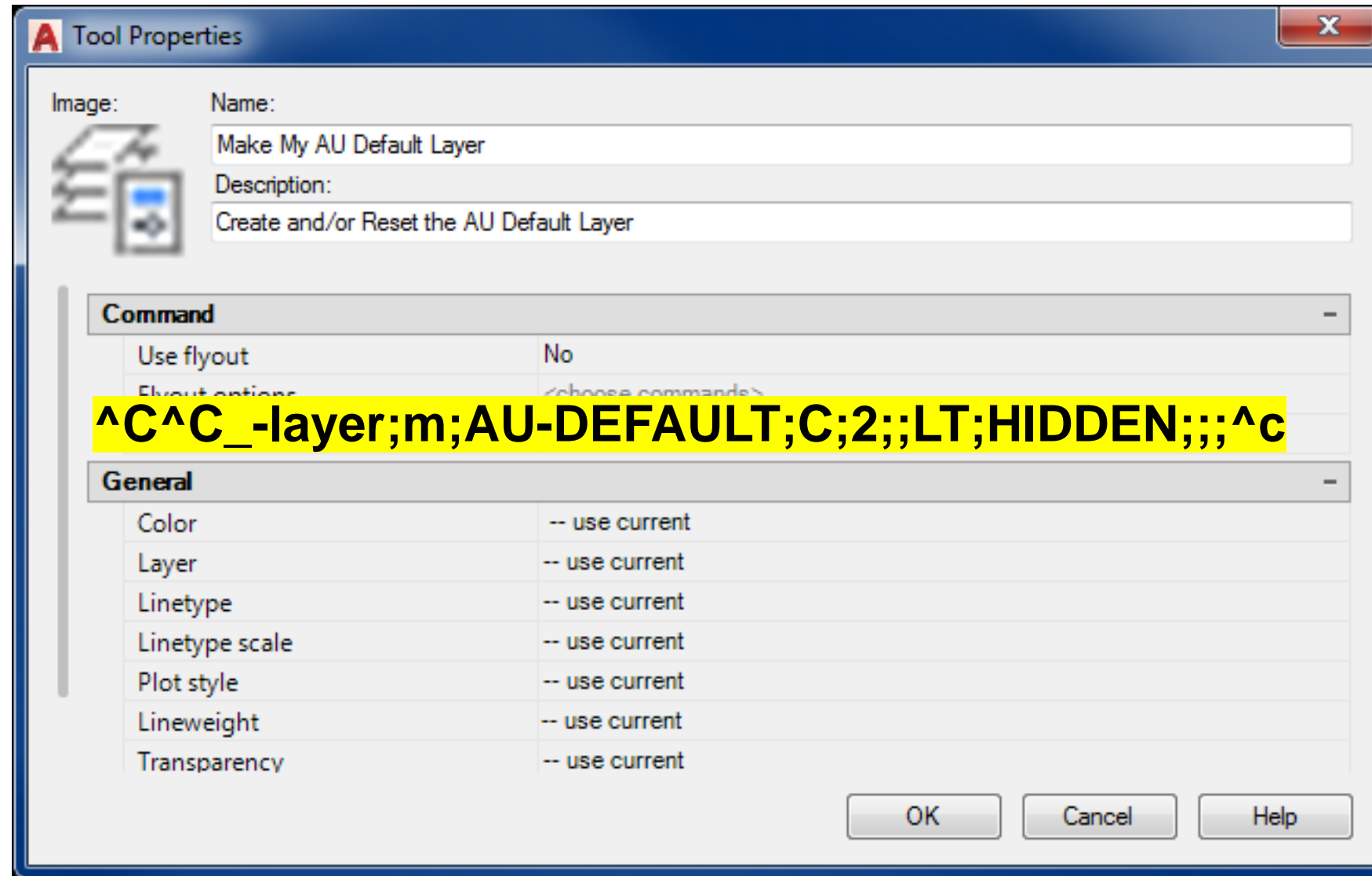
Command: **^C^C^R\_layout\_template;\"C:/datasets/GEN16077-L Pumping up Productivity with Macros/template/AU2016\_Template.dwt\"**

Use flyout	No
Flyout options	<choose commands>
Color	<input type="checkbox"/> ByLayer
Layer	-- use current
Linetype	ByLayer
Linetype scale	1.0000
Plot style	ByLayer
Lineweight	———— ByLayer
Transparency	ByLayer

OK Cancel Help

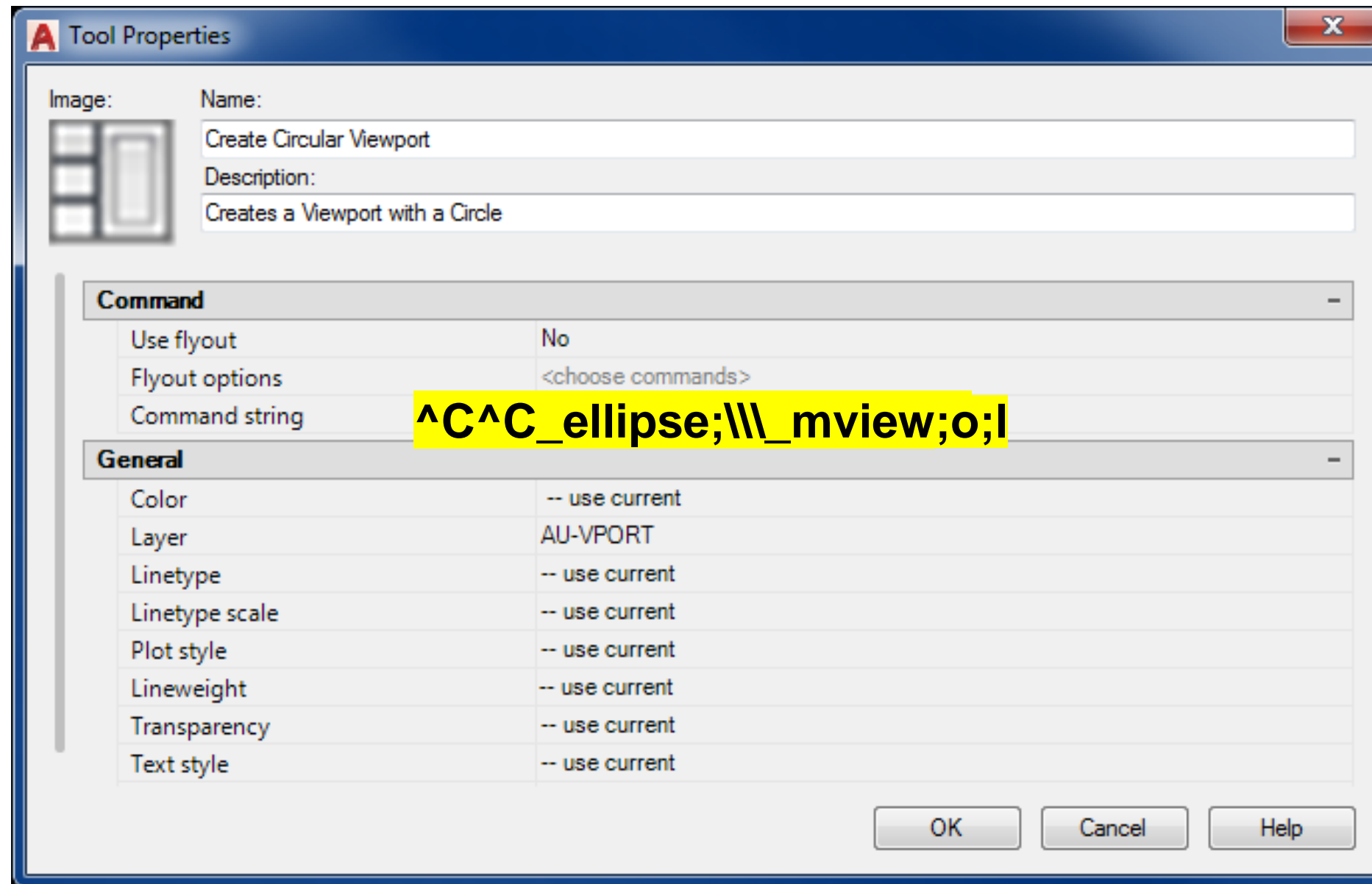
# Exercise 9

## Create / Reset a Layer with a Macro




# Exercise 10

## Create Floating Viewports – The Bird's Eye



**Tool Properties**

Image:  Name: Create Circular Viewport

Description: Creates a Viewport with a Circle

**Command**

Use flyout	No
Flyout options	<choose commands>
Command string	<b>^C^C_ellipse;\\_mview;o;l</b>

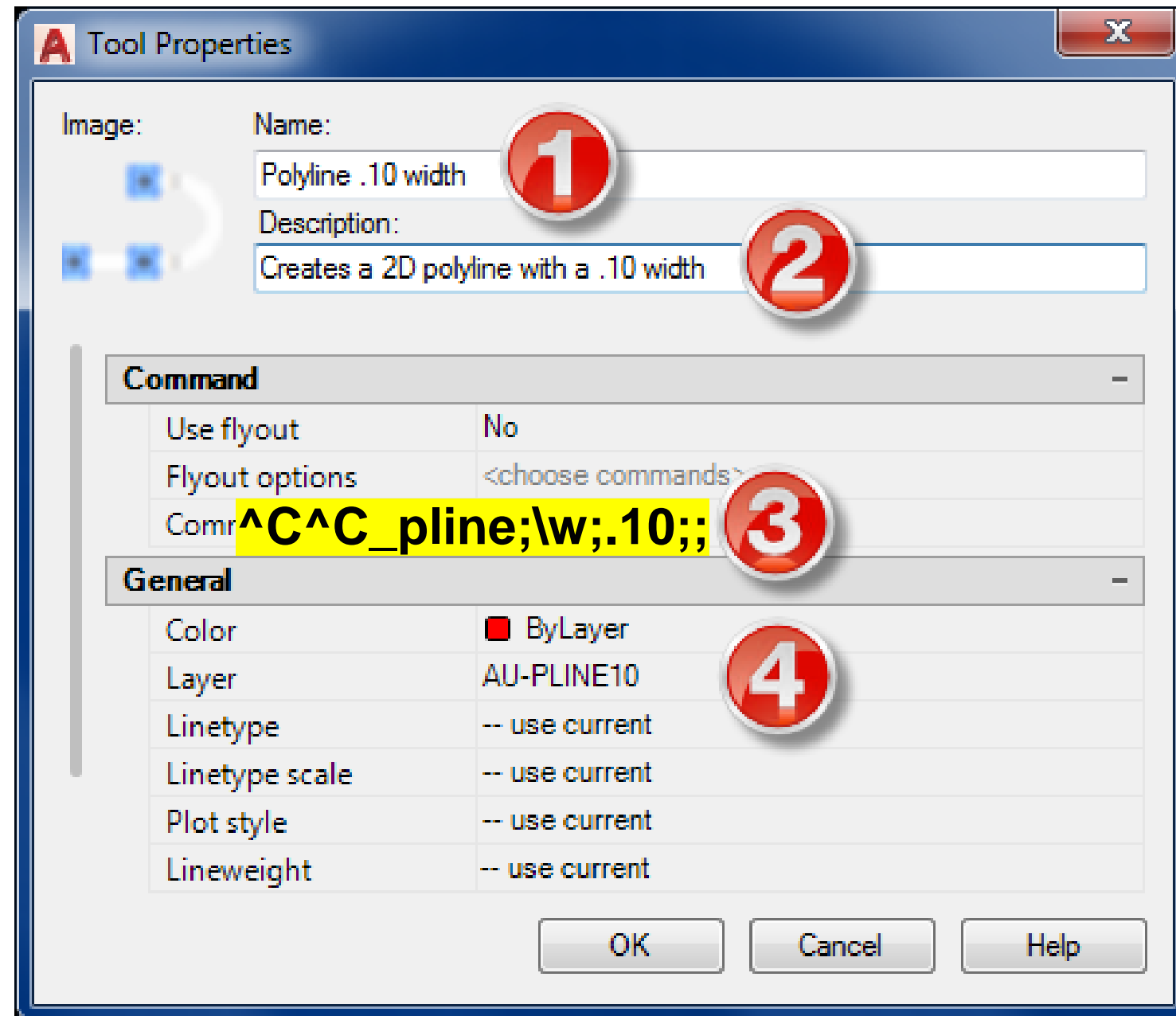
**General**

Color	-- use current
Layer	AU-VPORT
Linetype	-- use current
Linetype scale	-- use current
Plot style	-- use current
Lineweight	-- use current
Transparency	-- use current
Text style	-- use current

OK Cancel Help

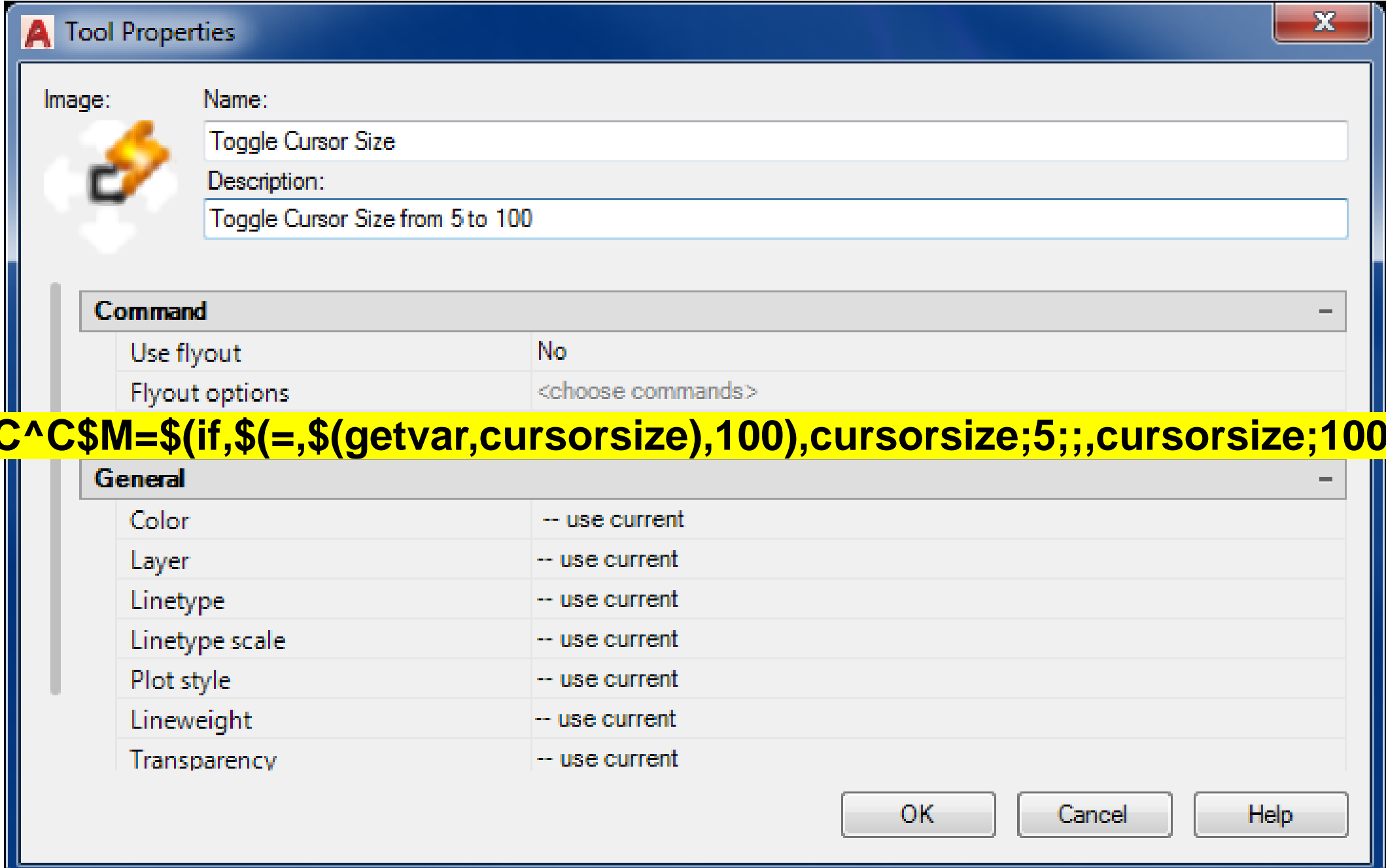
# Exercise 11

Draw a Polyline on a layer with a specific width




# Exercise 12

## Using DIESEL to Toggle Cursor Size



**Tool Properties**

Image:  Name: Toggle Cursor Size

Description: Toggle Cursor Size from 5 to 100

**Command**

Use flyout	No
Flyout options	<choose commands>

**General**

Color	-- use current
Layer	-- use current
Linetype	-- use current
Linetype scale	-- use current
Plot style	-- use current
Lineweight	-- use current
Transparency	-- use current

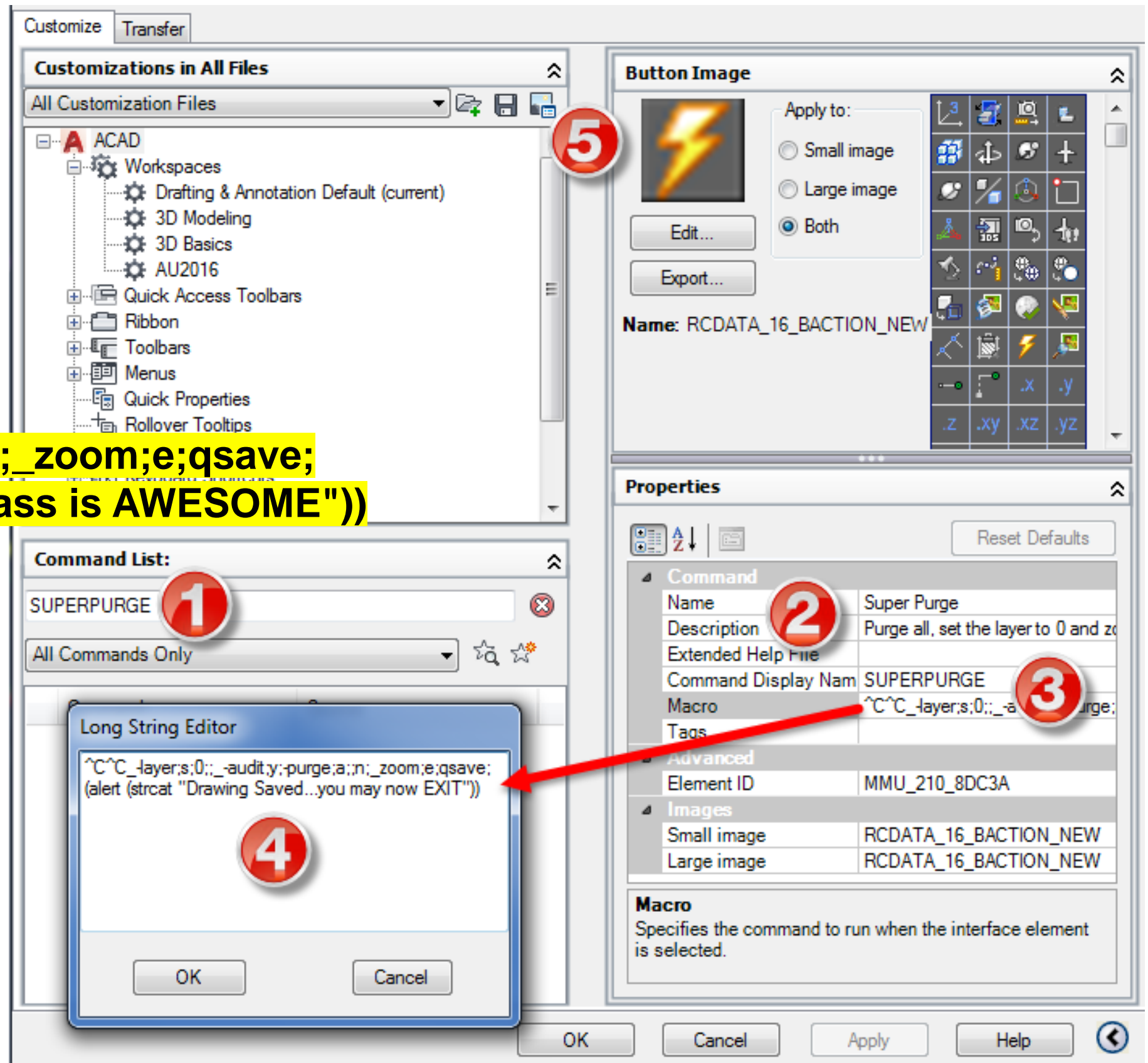
OK Cancel Help

**`^C^C$M=$(if,$(=,$(getvar,cursormsize),100),cursormsize;5;;;cursormsize;100;;)`**

# Exercise 13

## Super Purge

`^C^C_layer;s;0;;_audit;y;-purge;a;;n;_zoom;e;qsave;  
(alert (strcat "Drawing Saved...This Class is AWESOME"))`



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Session feedback is very important to Autodesk

- ✓ Attendees can complete the session survey on their mobile device, PC, or at a survey station.
- ✓ Each completed session survey enters you in that days drawing for a free AU2017 pass!
- ✓ You can help make AU2017 better!



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# Thank You!

My Name is Sam Lucido and I am **CADproTips!**



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