

## Let's Print a Multi-Color Heart!

- 1. Choose your path:
  - a. Open our Heart.stl in any version of Cura and slice it.
  - b. Create your own multi depth heart in Tinkercad (this path may be a bit more difficult, but fun!) Once you have an .stl, open any version of Cura and slice it.



2. Go to "Preview" and then "Layer view" and use the slider to find the layer where you want the filament to change color.





3. Save the .Gcode on your desktop and open it with a text edit program (such as Notepad or TextEdit).

() 54 minutes	0
7g · 2.23m	
Save to File	

4. Use the "Search" (command+f/ control+f) feature to search for the layer number where you want the file to change color. Type "**layer:**" and then the number of the layer from Cura in the window (no spaces).

🔴 🕘 🛑 🔢 NWA3D Keychain v	2.gcode ~
Q~ layer:11	1 🔕 < > Done 🗆 Replace
G1 F1500 E-6.5	
G0 F7200 X80.392 Y72.271	
GØ X79.207 Y72.742	
GØ X78.484 Y71.281	
G0 X78.049 Y70.988	
G0 X48.053 Y70.957	
G0 X42.829 Y71.036	
GØ X37.024 Y72.195	
GØ X36.549 Y73.831	
G0 X37.768 Y74.217	
G0 X37.898 Y74.719	
UU X37.989 174.08	
1 AVER 11	
G0 X37, 989 Y74, 68 72, 5	
:TYPE:WALL-INNER	
G1 F1500 E6.5	
G1 F3000 X38.966 Y76.873 E0.07985	
G1 X36.886 Y78.583 E0.08956	
G1 X36.391 Y78.99 E0.02131	
G1 X36.567 Y78.374 E0.01113	
G1 X37.615 Y74.706 E0.12688	
G1 X37.766 Y74.178 E0.01827	
G1 X37.989 Y74.68 E0.00968	
G1 F1500 E-6.5	
G0 F/200 X3/.898 Y/4./19	
GU X3/./6/ Y74.197	



5. Once you find the layer, create a new line below the layer title and type in "M600." Save the file as a .gcode.

	NWA3D Keychain v2.gcode –	– Edited ~		
Q~ layer:11		8	< >	Done Replace
G1 F1500 F-6.5				
G0 F7200 X80.392 Y72.271				
GØ X79.207 Y72.742				
GØ X78.484 Y71.281				
G0 X78.049 Y70.988				
G0 X48.053 Y70.957				
G0 X42.829 Y71.036				
G0 X37.024 Y72.195				
GØ X36.549 Y73.831				
G0 X37.768 Y74.217				
G0 X37.898 174.719				
TIME ELAPSED 1326 393406				
:1 AYFR: 11				
M600				
G0 X37.989 Y74.68 Z2.5				
;TYPE:WALL-INNER				
G1 F1500 E6.5				
G1 F3000 X38.966 Y76.873 E0.07	985			
G1 X36.886 Y78.583 E0.08956				
G1 X36.391 Y78.99 E0.02131				
G1 X36.567 Y78.374 E0.01113				
GI X37.015 Y/4./06 E0.12688				
C1 X37.700 174.178 E0.01827				
G1 F1500 F_6 5				
G0 F7200 X37.898 Y74.719				

- 6. Move the file to an SD card and start your print!
- 7. When the printer gets to the M600 line of code it will automatically pause and an alarm will sound. Remove the first filament and load the new filament color until you see the new color extruding out of the nozzle. As you change the filament, try to not press down. Use the pliers to carefully remove the filament hanging from the nozzle. Press the button to resume the print- you did it!

\*Because the nozzle stays hot, make sure you're around when it changes color. If it is left heated and unattended too long, the filament will bake into the nozzle and cause a clog.\*