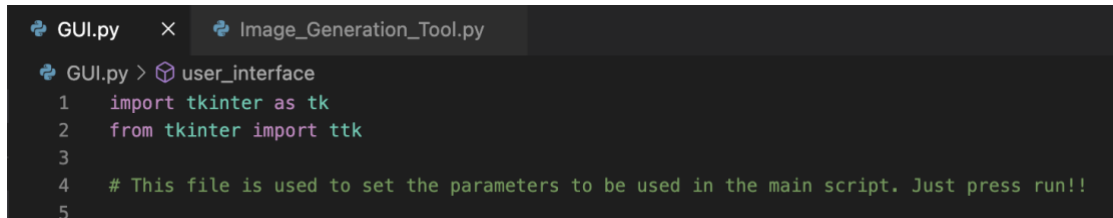


Instructions for use:

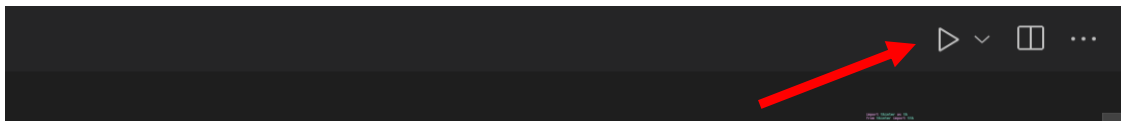
These instructions assume that the relevant software has been downloaded for the tool. Also that the Images, HDRI backgrounds & the STL model are saved in the main file, and that this file location has been added to the code.

1) Ensure you are in the VSCode tab “GUI.py”

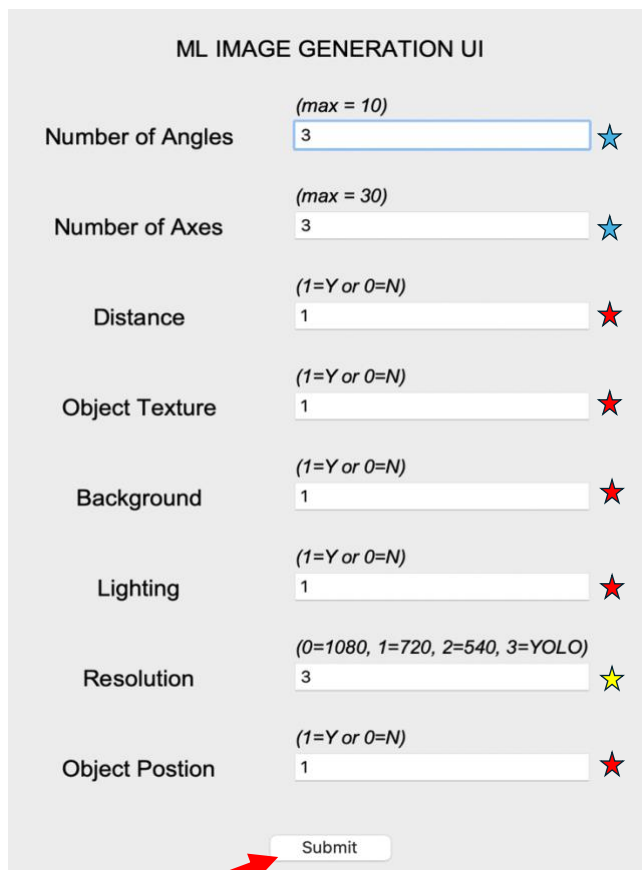


```
GUI.py × Image_Generation_Tool.py
GUI.py > user_interface
1 import tkinter as tk
2 from tkinter import ttk
3
4 # This file is used to set the parameters to be used in the main script. Just press run!!
5
```

2) Click the play button in the top right of the window.



3) From the pop-up **user interface** window, ensure the following options are entered, then press submit.



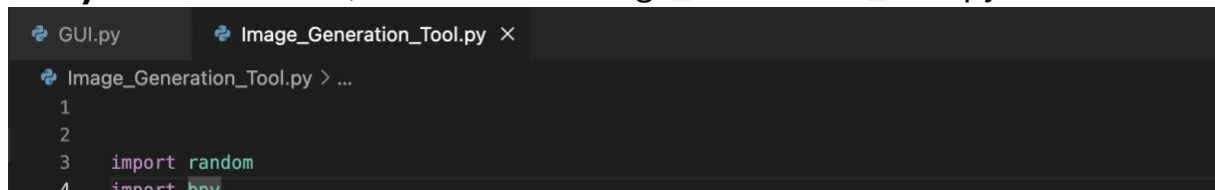
ML IMAGE GENERATION UI	
Number of Angles	(max = 10) 3 ★
Number of Axes	(max = 30) 3 ★
Distance	(1=Y or 0=N) 1 ★
Object Texture	(1=Y or 0=N) 1 ★
Background	(1=Y or 0=N) 1 ★
Lighting	(1=Y or 0=N) 1 ★
Resolution	(0=1080, 1=720, 2=540, 3=YOLO) 3 ★
Object Postion	(1=Y or 0=N) 1 ★
<input type="button" value="Submit"/>	

★ Multiply together to give you the number of images in the case shown 9 images will generate.

★ DR feature selection
0 = not included
1 = included

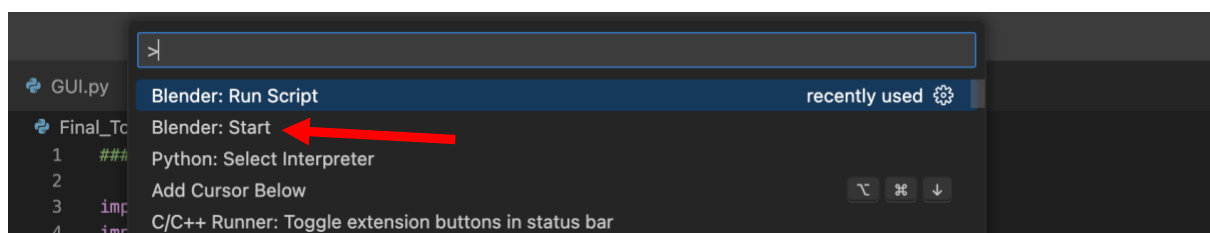
★ Resolution can be altered. This and the object backgrounds can be altered to include blur in the images.

4) On the VSCode, click on the “Image_Generation_Tool.py” window

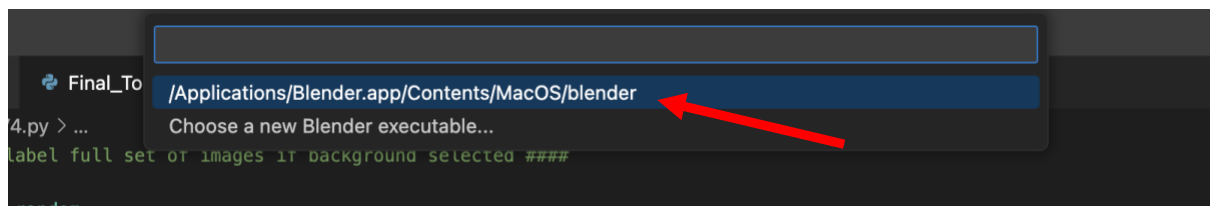


5) Press: **Command + Shift + P** (**Control + Shift + P** for Windows)

6) Press “Blender: Start”.



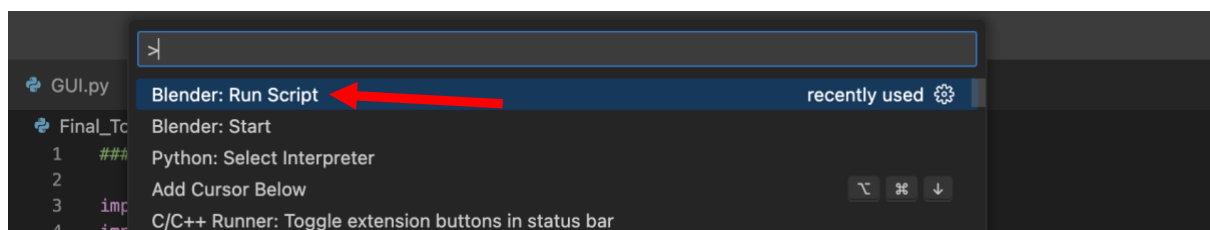
7) Press “/Applications/Blender.app?Contents/MacOS/blender”:



8) Return to VSCode window. Again, ensure that you are on the “Image_Generation_Tool.py” window.

9) Press: **Command + Shift + P** (**Control + Shift + P** for Windows)

10) Press “Blender: Run Script”



This should generate an image set of 9 images using your custom backgrounds, lighting HDRIs and part. This image set will be saved in the “Images” folder in the main file.