

## 86 Python art assessment: Creating the solution

You are to create a program using the python turtle module.

The program should draw out a picture. The picture drawn could be letters, a diagram or an image.

Choose a picture adapted to your level of skill in Python and write a header comment to explain what you are intending the program to draw.

Your program must:

- Import the turtle module
- Instruct the turtle (pen) move and turn in an attempt to produce the picture.
- Include comments to state which instructions draw which parts of the picture.

Your program should:

- have more than one color
- change the line thickness
- include a shape.
- 

Your program **might** also:

- change the default background
- use RGB defined colors
- use color fill on closed shapes
- use loops to draw multisided shapes
- use the turtle art toolkit or found (referenced) resources to produce stars, spirals and/or curves.
- Use speed settings or time delay to make the drawing creation more appealing

Extension: Allow the user a choice in what the program does (e.g. choosing the colours)

### Assessment guidelines:

Level	Level descriptor: the student	Example
1-2	i. <b>demonstrates minimal</b> technical skills when making the solution ii. <b>creates</b> the solution, which functions <b>poorly</b> and is presented <b>in an incomplete form</b> .	Your program imports the module and draws lines in different places
3-4	i. <b>Comments</b> the main steps in a program with some detail. ii. <b>demonstrates satisfactory</b> technical skills iii. <b>creates</b> the solution, which <b>partially</b> functions and is <b>adequately</b> presented	Your commented program uses color and line thickness to produce a recognizable shape or shapes.
5-6	i. <b>Comments</b> the steps in a program resulting in peers being able to understand its operation ii. <b>demonstrates competent</b> technical skills iii. <b>creates</b> the solution, which functions <b>as intended</b> and is presented <b>appropriately</b> .	In addition the program also uses several of the techniques listed in the “ <b>might</b> ” section above to produce a drawing.
7-8	i. <b>Comments</b> the steps in a program resulting in peers being able to understand its operation ii. <b>demonstrates excellent</b> technical skills when making the solution iii. <b>creates</b> the solution, which functions as <b>intended</b> and the final outcome is impressive.	In addition the program uses most of the techniques listed including functions from the toolkit or from referenced websites and the drawing must look good.

Hand in (named) –Working commented program (.py file).