

CG Lab Test

1. Draw a graph for scatter plot so that it can be used to give visual insight into data. The data for each are plotted as a dot position (height, weight) .
2. A polyline is defined as a chain of line segments. Write a program that is able to generate a set of interesting polyline patterns.
Let Forward be the function handling 'f' (where f is to add new segment in polyline), Turn(θ) be the rotation function handling 't', and Scale(s) be the scaling function handling 's'/'S', we can construct some patterns using the following procedures:

Pattern	Key	procedure
Polygon(n)	p	{ Forward(); Turn($2\pi/n$); }
Star(n)	a	{ Forward(); Turn($4\pi/n$); }
Spiral(n, θ , s)	r	{ Forward(); Turn(θ); Scale(s); }