

Workshop Week 2:

1. Write a void function which finds and prints the midpoint coordinates of a line. The function should take in four parameters (x1, y1, x2 and y2).
$$x_{mid} = (x1 + x2) / 2, y_{mid} = (y1 + y2) / 2$$
2. Write a function that takes two integers as arguments and return the greatest among them.
3. Write a void function which takes one integer (n) as a parameter. Your function should then print out all triangular numbers from 1 up to the nth term.
4. Write a function named “velocityCalc” which returns an appropriate value for the formula “ $v = u + at$ ”, where v is the final velocity, u is the initial velocity, a is the acceleration and t is the time that has elapsed. Depending upon which variable is set to “NAN” when the function is called, your function should work it out and return the value.
5. Write a void function named “equations” which solves simultaneous equations. Your program will take six parameters. E.g. function(double a, double b, double c, double d, double e, double f){}. By solving simultaneous equations, you are finding where the two lines cross each other, so your function should print an x and y coordinate.
$$ax + by = c \dots\dots(i)$$
$$dx + ey = f \dots\dots(ii)$$

a = number in front of x of equation one
b = number in front of y of equation one
c = constant of equation one
d = number in front of x of equation two
e = number in front of y of equation two
f = constant of equation two