**COL226: Assignment #1**

Approach:

First of all let me clear for given n points in 2-D co-ordinate what will I find, and how will I find.

**What to find** : So, as it is asked to find “area under the curve” not “area enclosed by the curve” I will consider area as a signed quantity, where area below the x axis is considered negative and above the x axis is considered positive.

**Text, letter

Description automatically generatedHow to find:** For finding area inside a triangle we can use the co-ordinate formula for that, but here we have two points and we need to find the area between straight line joining them and x-axis. This can be done using that triangle concept by breaking area as follows:

Now that we have area under two successive points we can add all successive points areas to get the total area under curve.

(xi+1-xi)\*( yi+1+yi)