**CL-118 Programming Fundamentals Project Abstract**

**Firework Shape: Pistill**

First of all, we make functions (lines of code that can be used again and again for one specific purpose) with names according to the lines’ positions to which they assign stars. These functions take the values of “**startrow**”, “**startcol**”, “**endrow**”, “**endcol**” which are the numbers from where the row starts, row ends, column starts, and column ends respectively. Then the functions assign or give character **star** “\*” to those rows and columns. These functions also take the list of all the positions of the pistil fireworks. These functions contain specific repetitions that prints lines in different angles like, **line\_135** will assign stars to the positions where it’ll make a 135degree line. Secondly, we call a function named “**stem**”, to give values to the position where the main center of the fireworks lies. Thirdly, we call the angular functions to print some short lines to make the stem look denser than the outer part of the firework. After assigning stars to the central position, we call a lot of different functions to assign stars to the rest of the position where remaining six lines lie. Now that we have assigned stars to the places where we need the fireworks, we assign a null space character to the rest of the places using if condition. Finally, now that every space and position has got a value. We print the whole array of Pistill fireworks with a nested loop. We use a special function to give the fireworks a bit of delay to make it look more like fireworks.