SPIRAL TRAVERSING – LET'S ANIMATE 06

Hello everyone in last video we saw how we can use basic turtle i mean we can use the turtle library to create basic programs basic pattern programs and basic animations will use this in our will use the turtle in our last program that we did for the spiral traversing to create the pattern that is creating the animation where there were dots printed in spiral order so this is the program which, which i created which i created before traversing the matrix in spiral order, will use this programme to create the animation so let me first import the turtle, import turtle by default whenever a turtle is created the canvas which is created has a default white value the background colour is white i am going to need a background colour of black so i will create a canvas of black background for that turtle dot bg colour that is black ok now i will create a turtle name Seurat to create i have to write turtle dot turtle i created a turtle, whenever i am going to traverse towards the matrix i am going to print a dot for that i need a circle kind of thing so for that i need a width variable i will create a width variable of size let say five and a height variable of size seven and whenever i go to a particular element i will print this thought and i will move forward with some distance so i need that distance so i will write the distance at dot underscore distance which is let's say twenty five ok create, now i created this turtle but i need a initial position for where it should start for that i will set the initial position is dot set position to minus two fifty comma two fifty you can change the position according to your program but i am keeping it minus two fifty comma two fifty it actually starts centre all with always starts from centre so if you put zero comma zero it the position of the turtle will be at the centre of the canvas but i need it at the left most top most left corner so for that i am keeping it the x coordinate as minus two fifty and y coordinate as two fifty while i see this i need the colour of the dot as white because my background is black so for that i will write dot colour which is white great now inside my while loop i will go ok whenever i print first row after printing the first row my after going through the first row my turtle position should be at angle of ninety degrees should move at the angle of ninety degrees so that it can go downwards so in order to go downwards i have to put it downwards i have to put the position of turtle i have to move the position of the turtle within the angle of ninety degree but it should be it should print as the first row as, as usual i mean it should go forward in the right direction it should not print in downward direction from the first row only so from that i will create a variable to check that lets say flag of f as zero ok after printing this ok so i will check here if f is equal equal to one it means i already printed the first row i will move the position of i mean that direction of a turtle at the angle of ninety degree to the right ok and here after printing the first row now i don't need to print the array here just command it and instead of this i will write here ok dot forward with distance which i put as the variable dot distance ok and after i print the first row i need to set my flag value which means if this is ok and after this you always have to turn the position of the turtle at the angle of ninety degree to the right side that's why i created this flag value of the left ok done so first row is over after the first row ok i print the elements of the row i have to print the column i mean in the first iteration i was printing the last all the elements of last column so i have to print in the downwards way for that i have to change the angle of my turtle to downwards it means to the

right of ninety degree that is dot right i put ninety degree again here i don't need to print the elements i will just command it and i will write my turtle i will forward my turtle to dot distance, after this again i have to change the direction of my turtle to the ninety degree for that dot right ninety that's it this is also printing i don't need this so i will just command it and instead of printing the element i will just forward my turtle forward with dot distance again same thing after printing the last row i mean the row in reverse order i have to again change the direction so i will do this right ninety here again i will not print this i will forward let me copy this and forward it, distance ok great so now i don't need all of these arrays because i am not printing any of the array nor i need this count value ok i just have to call this let me change the parameters here this is ok let me do this for the value twenty rows and twenty columns ok i am done so i will write turtle dot done lets run this, cool. See i created my spiral traversing so i am getting lines ok this is all what we have to do now little after little tuning up we get created what we get created in the first video what we saw in the first video so this is exactly what you wanted to do you can, you can take this program change whatever order you want to change this is the main program actually, you can fill the colours, you can change the shape you can you can do something else ok but this is the main program ok thank you.