Practice 01:

Implementation of Shell Sort in Python

Code:

def shellSort(arr):

gap = len(arr)

while gap > 0:

i = 0

j = gap

while j < len(arr):

if arr[i] >arr[j]:

arr[i],arr[j] = arr[j],arr[i]

i += 1

j += 1

k = i

while k - gap > -1:

if arr[k - gap] > arr[k]:

arr[k-gap],arr[k] = arr[k],arr[k-gap]

k -= 1

gap

# Main Function

arr2 = [12, 34, 54, 2, 3]

print("input array:",arr2)

shellSort(arr2)

print("sorted array",arr2)