Week-1

Program-1 : Bubble sort

```
input_seq = input() # Takes a space seperated sequence of numbers as input
str_array = input_seq.split(' ') # Eliminates the spaces
init_array = list(map(int, str_array)) # Converts the dtype of each element to integer

for i in range(len(init_array)-1): # Logic for bubble sort
    for j in range(len(init_array)-1-i):
        if init_array[j]> init_array[j+1]:
            temp = init_array[j]
            init_array[j] = init_array[j+1]
            init_array[j+1] = temp
print(init_array)
```

Program-2 : Tower of Hanoi

```
# The function below provides all the steps in solving the tower of hanoi

def Hanoi(n:int, start:str, aux:str, end:str):
    '''n(int) - number of discs
    start(str) - starting pole
    aux(str) - auxilary pole
    end(str) - ending pole'''
    if n==1:
        print(f"disc{n} goes from {start} to {end}")

    if n>1:
        Hanoi(n-1, start, end, aux)
        print(f"disc1 goes from {start} to {end}")
        Hanoi(n-1, aux, start, end)
# Example-
Hanoi(3,'A','B','C')
```