

## **SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, Kattankulathur**

### **School of Computing**

#### **21CSC201J – Data Structures and Algorithms**

##### **Topic: Inserting an Element into an Array**

##### **Activity: Fill the missing Pseudocode**

#### **Algorithm to append a new element VAL to an existing array**

Step 1 : Set upper\_bound = 5 ;  
Step 2 : Set A[ upper\_bound ] = VAL ;  
Step 3 : EXIT

#### **Algorithm to insert an element VAL in the middle of an array given a position POS**

Step 1 : [INITIALIZATION] SET I = 1  
Step 2 : Repeat Steps 3 and 4 while I <= N  
Step 3 :       SET A[ POS + I ] = A[ I]  
Step 4 :       SET I = I + 1  
          [END OF LOOP]  
Step 5 : SET N = N + 1  
Step 6 : SET A[POS] = VAL  
Step 7 : EXIT