**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 = upper\_bound + 1

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=N

Step 2 : Repeat Steps 3 and 4 while I >= POS

Step 3 : SET A[I+1] = A[I]

Step 4 : SET I = I - 1

[END OF LOOP]

Step 5 : SET N = N = N + 1

Step 6 : SET A[POS] = VAL

Step 7 : EXIT