**Insert a card in a list of sorted cards**

***Algorithm***

|  |  |
| --- | --- |
| **Step 1** | Start Process |
| **Step 2** | Assign mycards with list of cards [4,5,7,8,9] |
| **Step 3** | Assign length\_of\_my\_cards is 5 |
| **Step 4** | Assign in\_card as 6 and flag as 0 i and j are 0 |
| **Step 5** | Assign temp\_cards list that contains 6 elements assigned as 0 [0,0,0,0,0,0] |
| **Step 6** | Print before inserting my\_cards list |
| **Step 7** | Assign cur\_card as my\_cards[i] |
| **Step 8** | If cur\_card is less than in\_card then assign temp\_cards[j] equals to my\_cards[i] and goto Step 12 |
| **Step 9** | Else check for flag |
| **Step 10** | If flag is zero then assign temp\_cards[j] as in\_card and flag as 1 then increment j by value 1 and goto Step 7 |
| **Step 11** | Else assign temp\_cards[j] equals to my\_cards[i] and goto Step 12 |
| **Step 12** | Increment i and j by value 1 |
| **Step 13** | If i is less than length\_of\_my\_cards goto Step 7 |
| **Step 14** | Else assign my\_cards as temp\_cards |
| **Step 15** | Print After inserting my\_cards |
| **Step 16** | Stop Process |

***Flow Chart***

***Pseudo code***

START

SET my\_cards = [4,5,7,8,9]

SET length\_of\_my\_cards = 5

SET in\_card = 6

SET flag = 0

SET i = 0

SET j = 0

SET temp\_cards = [0,0,0,0,0,0]

PRINT “Before Insertion : “ my\_cards

WHILE i less than or equal to length\_of\_my\_cards

SET cur\_card = my\_cards[i]

IF cur\_card < in\_card THEN

temp\_cards[j] = my\_cards[i]

ELSE

IF flag = 0 THEN

temp\_cards[j] = in\_card

flag = 1

INCREMENT j

CONTINUE

ELSE

temp\_cards[j] = my\_cards[i]

END IF

END IF

INCREMENT i

INCREMENT j

END WHILE

SET my\_cards = temp\_cards

PRINT “After Insertion : “ my\_cards

STOP