ASSIGNMENT 3 NAME : ARAVINTH KUMAR D

1.Update method to perform insertion sort.

STEP 1: Insertion sort is playing cards. Consider initially player has three cards that number has (2,3,5).

STEP 2: Now, player has take new card that is 10. Compare new card with previous right most card that is 5. 10>5. Place the card 10 to right most.(2,3,5,10).

STEP 3: Now, player has take new card that is 9. Compare new card with previous right most card that is 10. 9<10. Now compare with( previous right most card-1) that is 5. 9>5.now place card 9 in between 5 and 10.(2,3,5,9,10).

PSEUDOCODE:

for i=0 to A.lenght-1

current = A[i]

j = i-1

while (j>=0 && A[j]>current)

A[j+1] = A[j]

j= j-1

A[j+1] = current

2. Create a sorted array and search an element in it.

STEP 1: consider the sorted array Array[] = {3,7,20,32,35}.

STEP 2 : Search element 32. Find the mid of the array.

STEP 3: Take the final indexes value in the array that is 4 and add items which is mid of the left part. divide by 2. ((4+0)/2)) = 2.

STEP 4: A[2] is the mid. Here mid element is 20. Ignore all the element which is left of an mid element. Consider only{3,7,**20,32,35**}.

STEP 5: Again find mid ((4+2)/2) = 3 . Now A[3] = 32.