ASSIGNMENT 5

1)

void insertionSort(int arr[], int n)

{

    int i, key, j;

    for (i = 1; i < n; i++) {

        key = arr[i];

        j = i - 1;

        /\* Move elements of arr[0..i-1], that are

          greater than key, to one position ahead

          of their current position \*/

        while (j >= 0 && arr[j] > key) {

            arr[j + 1] = arr[j];

            j = j - 1;

        }

        arr[j + 1] = key;

    }

}

2)

 def push(self, x):

        self.mainStack.append(x)

        if (len(self.mainStack) == 1):

            self.trackStack.append(x)

            return

        # If current element is greater than

        # the top element of track stack,

        # append the current element to track

        # stack otherwise append the element

        # at top of track stack again into it.

        if (x > self.trackStack[-1]):

            self.trackStack.append(x)

        else:

            self.trackStack.append(self.trackStack[-1])

    def getMax(self):

        return self.trackStack[-1]

    def pop(self):

        self.mainStack.pop()

        self.trackStack.pop()