Algorithm findThirdLargest(A)

Input array A of integer

Output thirdLargestNumber of array

Max <- A[0]

count <- 1

For i<- 1 to n-1 do

If A[i] > Max then

Max <- A[i]

count <- 1

If A[i] == Max then

Count <- Count + 1

SecondMax <- A[0]

If Count >=2 then

SecondMax <- Max

Count <- Count – 1

Else then

For i<- 1 to n-1 do

If A[i] > SecondMax AND A[i]<Max then

SecondMax <- A[i]

Count <- 1

If A[i] == SecondMax then

Count <- Count + 1

ThirdMax <- A[0]

If Count>=2 then

ThirdMax <- SecondMax

Count <- Count – 1

Else then

For i<- 1 to n-1 do

If A[i] > ThirdMax AND A[i]< SecondMax then

ThirdMax <- A[i]

Count <- 1

If A[i] == ThirdMax then

Count <- Count + 1

Return thirdMax