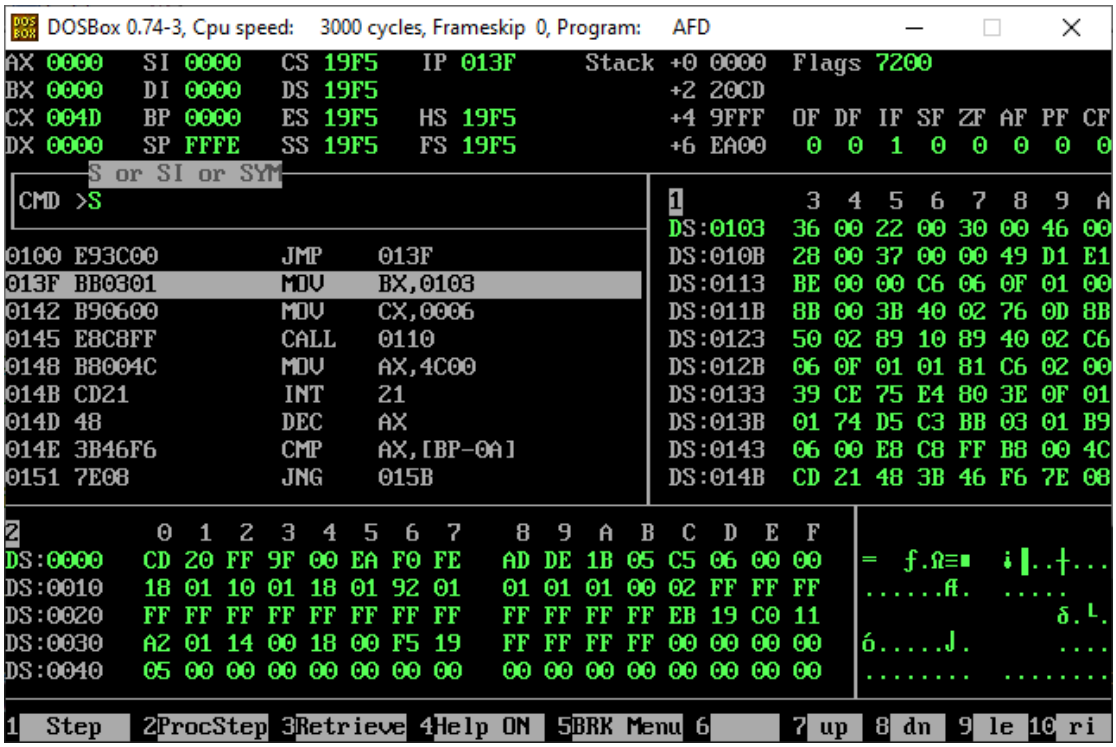
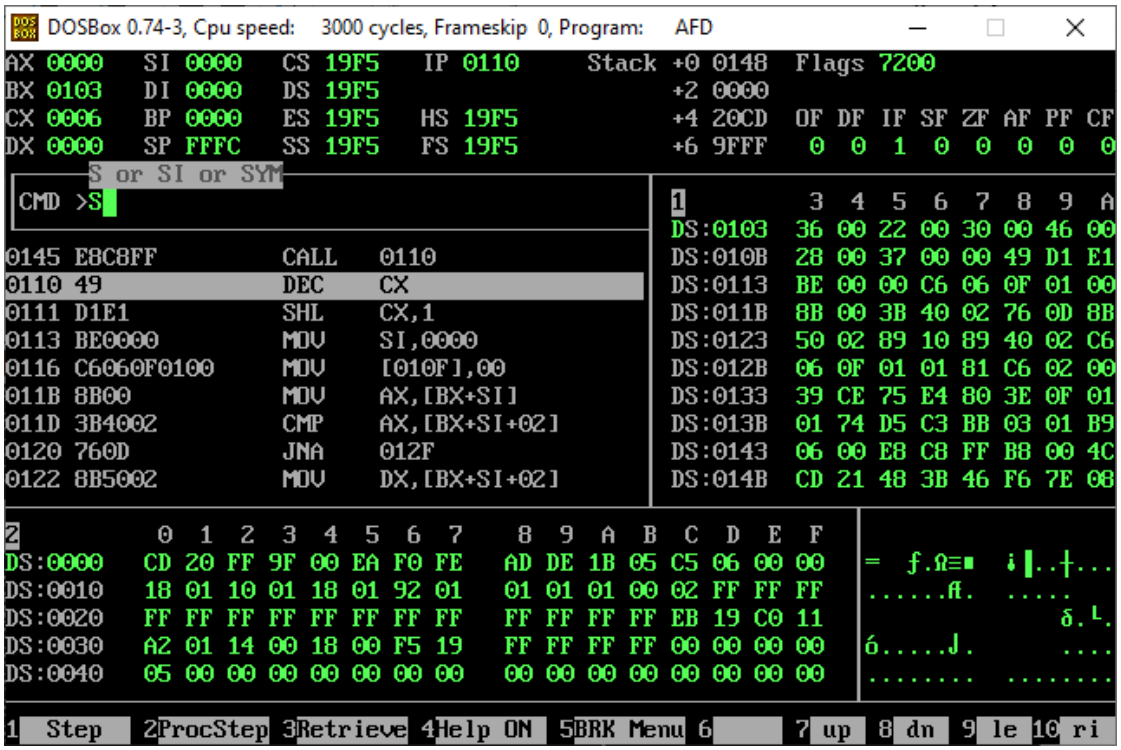
TASK 1

5.1 Example After Changing Values

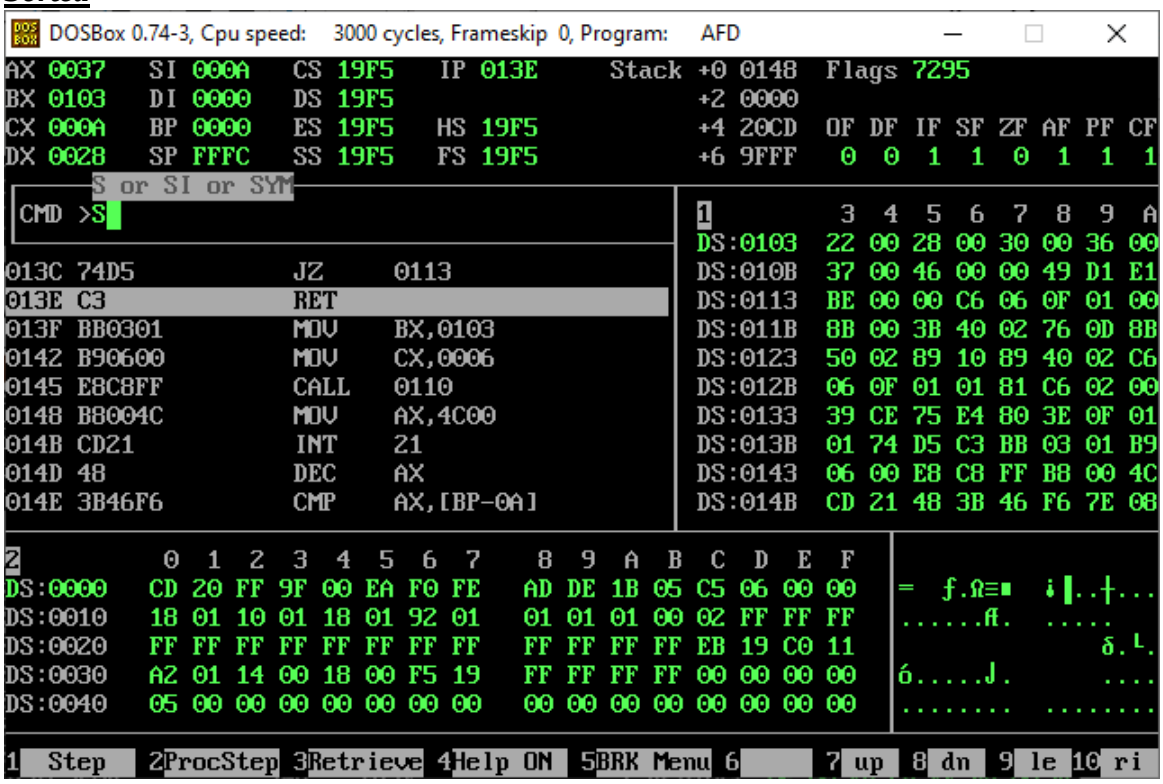
Before Sorting



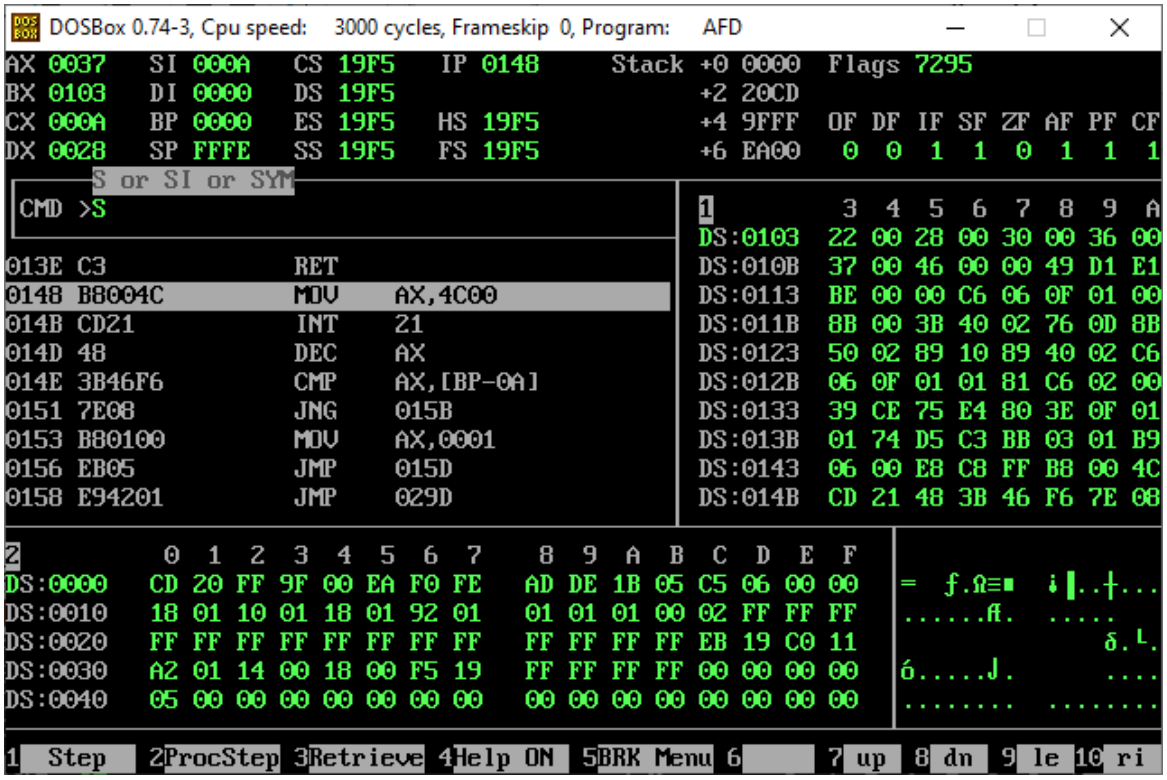
When Subroutine Is Called



Sorted



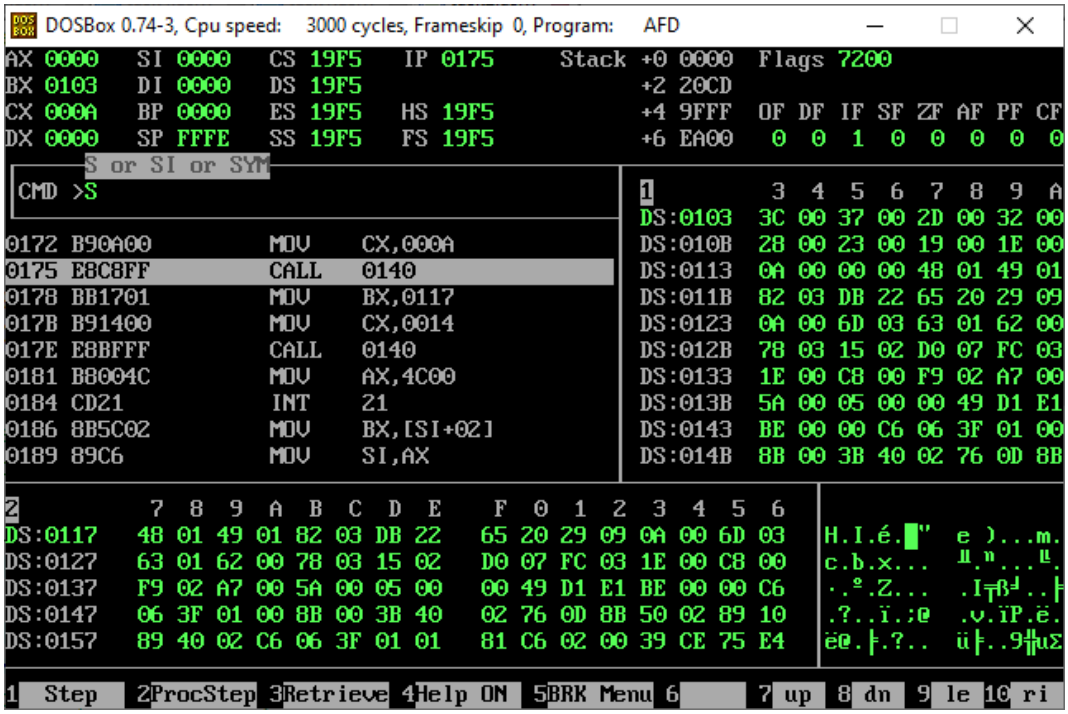
After Subroutine Returns



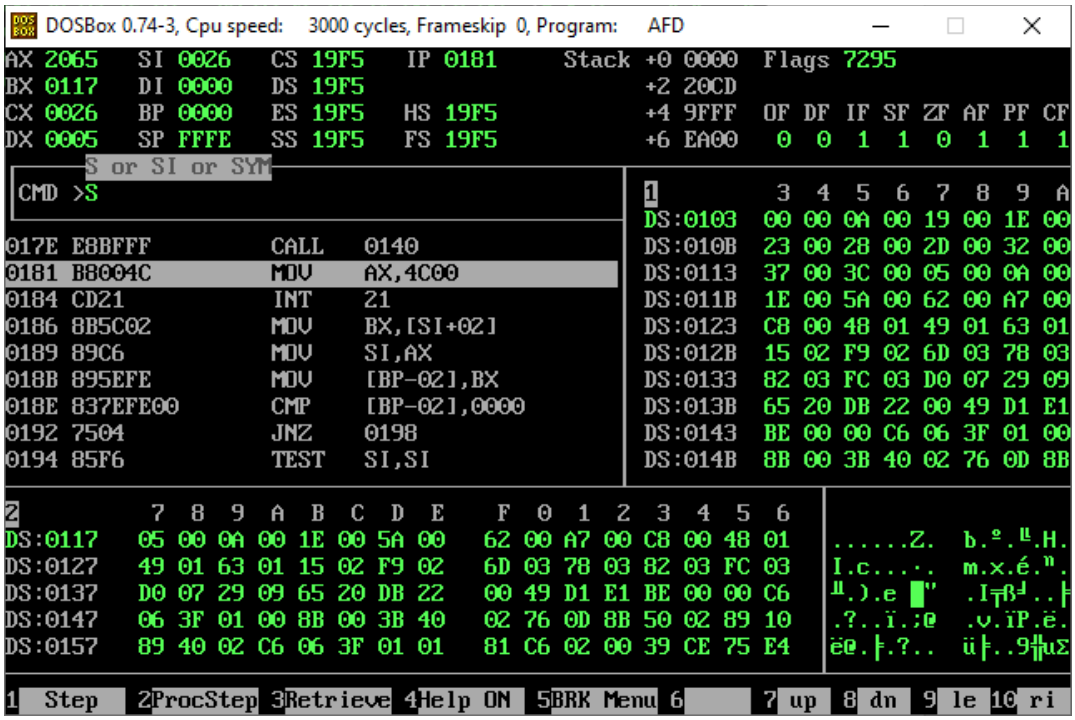
TASK 2

5.2 Example Running As It Is

Before Sorting



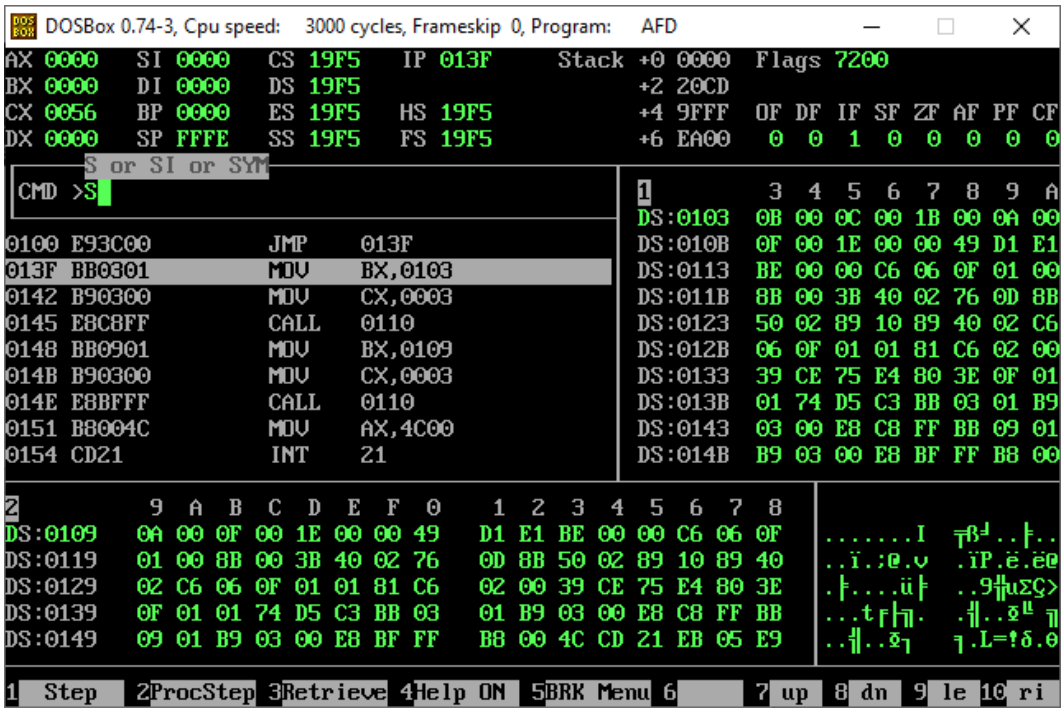
After Sorting



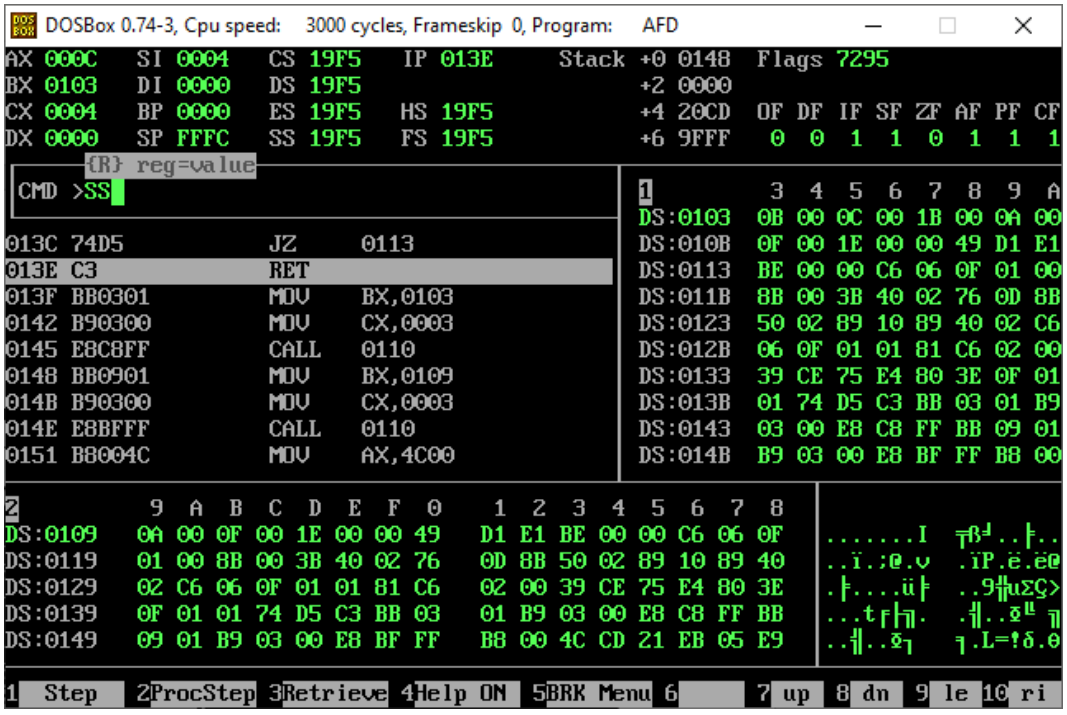
Task 2

Example 5.2 After Changing Values

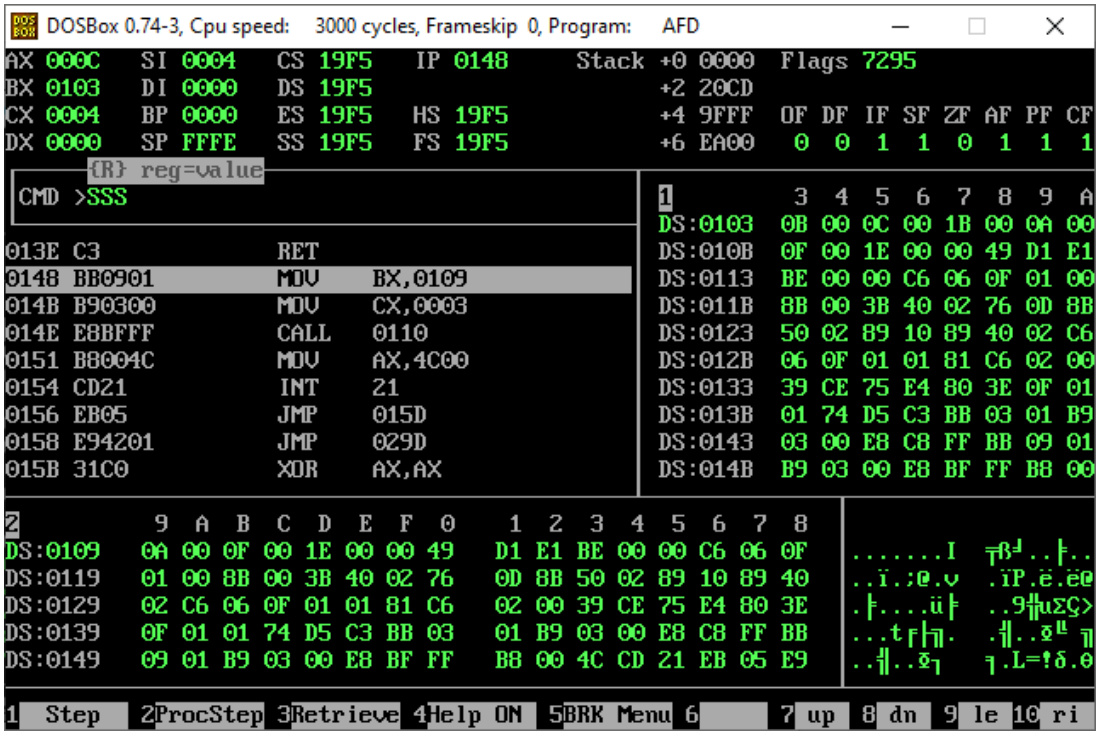
Before Sorting And Calling Subroutine



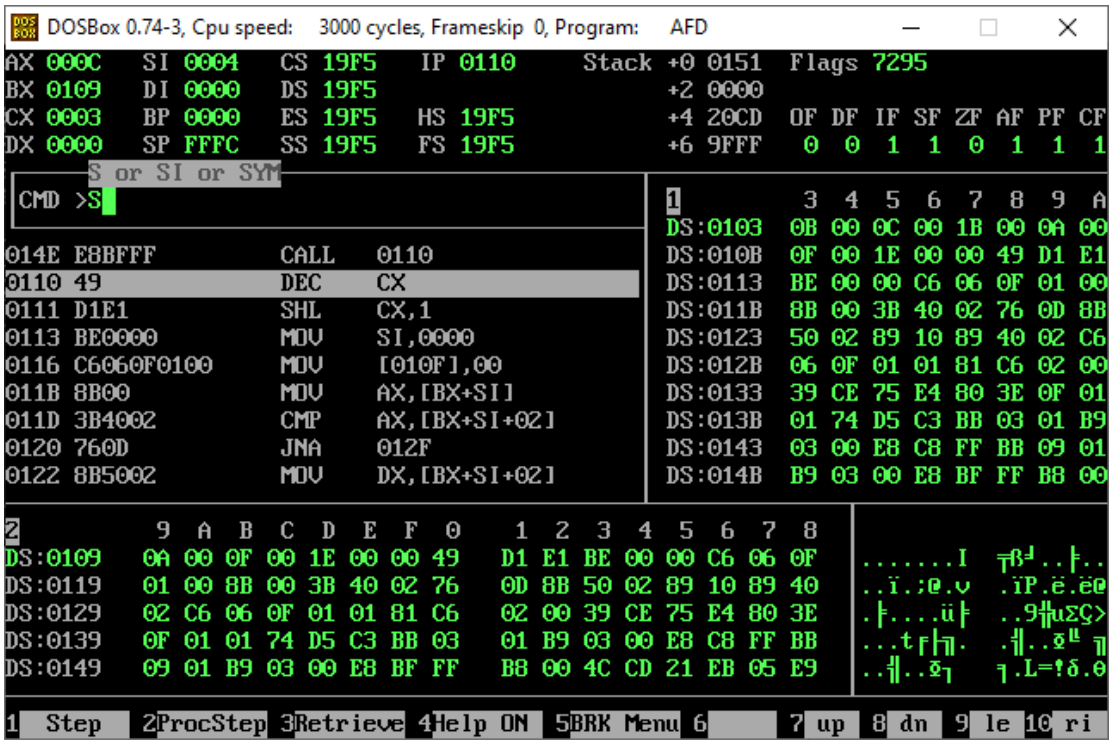
After Sorting First Data Set And Before Returning From The Subroutine For The First Time



After Sorting First Data Set And Returning After The First Subroutine Call And Second Data Set Is Still Not Sorted

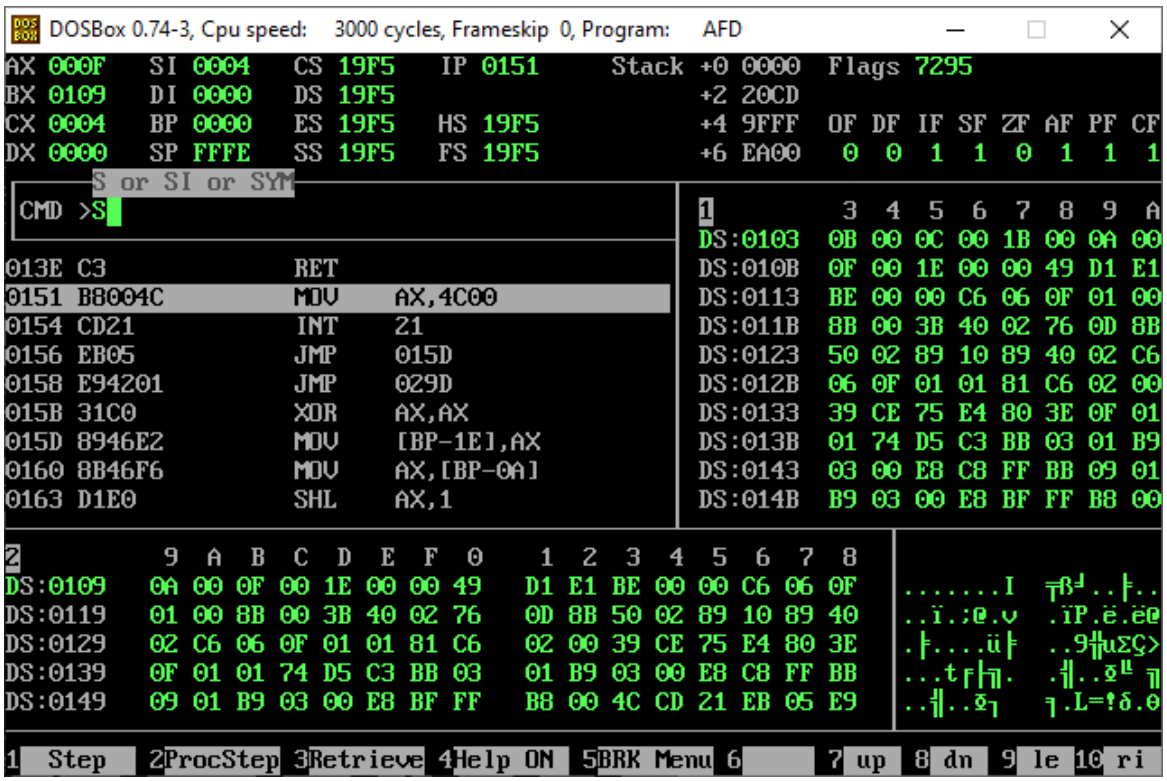


After Calling The Subroutine For The Second Data Set Which Is Not Sorted Till Now As Can Be Seen The Stack Has Pushed The Address Where It Will Return After Sorting Out The Data



Second Data Set Is Also Sorted And The Subroutine Has Returned

So Both The Data Sets Are Now Sorted



HENCE THE MAIN DIFFERENCE IN BOTH THE EXAMPLES IS THAT , THAT IN THE 5.1 EXAMPLE THERE IS ONLY ONE DATA SET AND THE SUBROUTINE IS CALLED ONLY ONCE FOR THAT DATA SET ONLY HOWEVER IN 5.2 THERE ARE 2 DATA SETS AND THE SUBROUTINE IS CALLED TWICE FOR BOTH THE DATA SETS WHICH SORTS OUT BOTH THE DATA SETS.