Read Me

The inputs have been stored at X, then these are copied to address Y and then these inputs at Y are sorted using bubble sort.

We can execute the file using the command:-

"java -jar Mars4_5.jar nc IMT2019003_mips1.asm"

Note that each input should be given in a different line. The inputs should be given in the following format:-

```
>> <number of integers = N>
>> <address X>
>> <address Y>
>> integer1
>> integer2
>> .....
>> integerN
```

Bubble sort in C which has been converted to MIPS assembly language

```
void bubbleSort(int arr[], int n)
{
   int i, j;
   for (i = 0; i < n-1; i++)

        for (j = 0; j < n-i-1; j++)
        if (arr[j] > arr[j+1])
            swap(&arr[j], &arr[j+1]);
}
```

Snapshot of the following inputs is given the next page:-

```
>> 10

>> 268501024

>> 268501120

>> 10

>> -3

>> 4

>> -7

>> 6

>> 2

>> -3

>> -7

>> 1

>> 0
```

```
aditya@aditya-Lenovo-ideapad-330-15IKB: ~/Desktop/college_sems/3/Computer architecture/assn 2
File Edit View Search Terminal Help
aditya@aditya-Lenovo-ideapad-330-15IKB:~/Desktop/college_sems/3/Computer architecture/assn 2$ java -jar Mars4_5.jar nc IMT2019003_mips1.asm
10
268501024
268501120
10
-3
aditya@aditya-Lenovo-ideapad-330-15IKB:~/Desktop/college_sems/3/Computer architecture/assn 2$
```