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| Insertion Sort |
| Data Structures Made Easy |
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# 1. *Insertion Sort*

class insertion\_Sort{

public static void insertion(int [] insert\_Array, int size){

for (int i = 1; i < size; i++){

int index = i;

int element = insert\_Array[index];

while ((index > 0) && (insert\_Array[index-1] > element)){

insert\_Array[index] = insert\_Array[index-1];

index--;

}

insert\_Array[index] = element;

}

}

public static void main(String [] args){

System.out.print("Enter the number of elements: ");

int size = Console.readInt();

int [] insert\_Array = new int[size];

System.out.print('\n' + "Enter the elements: ");

for(int index\_1 = 0; index\_1 < size; index\_1++){

int element = Console.readInt();

insert\_Array[index\_1] = element;

}

insertion(insert\_Array, size);

System.out.print('\n' + "The sorted list is: ");

for(int index\_2 = 0; index\_2 < size; index\_2++)

System.out.print(insert\_Array[index\_2] + " ");

}

}