Name : _____   **Date : _____**

A+ Computer Science - Sort/Search Worksheet 3

Directions :   Fill in the blanks below.

```
public void sort3(Comparable[] list )
{
   sort3(list, 0, list.length);
}

private void sort3( Comparable[] list, int front, int back)
{
   int mid = (front+back)/2;
   if( mid==front) return;
   sort3(list, front, mid);
   sort3(list, mid, back);
   help(list, front, back);
}

private void help(Comparable[] list, int front, int back)
{
   Comparable[] temp = new Comparable[back-front];
   int i = front, j = (front+back)/2, k =0;
   int mid =j;
   while( i<mid && j<back)
   {
      if(list[i].compareTo(list[j])<0)
         temp[k++]=list[i++];
      else
         temp[k++]=list[j++];
   }
   while(i<mid)
      temp[k++]=list[i++];
   while(j<back)
      temp[k++]=list[j++];
   for(i = 0; i<back-front; ++i)
      list[front+i]=temp[i];
}
```

```
 Integer[] list  = {3,15,61,11,7,9,2,33};


 Show the contents of list after 5 passes of sort3.
```