

## Team Report

-**sortMe []** , sortMe is a function that takes a list as input .It is used to sort *statslist* .The list is in the format of ["element",[(,),()],[(,),(),)]the function takes out the first element in statsList and then calls **sort1** on first on the list that contains the elements on the right of our element and then on the elements below of our element.

-**sort1**, this function in turn separates the input list into head+ tail , and calls **sort** on each.

-**sort**, the function compares 2 items in a list by their frequencies using an if condition and switches the pairs depending on the frequency.

-**statsHelper** , takes 2 lists, calls generate on the head and the rest of the list.

-**helperOne** , helperOne is our main function that either calls **helperRight** or **HelperBelow** depending on the position "x"

-**helperRight**, the function takes an element and a list, it compares the element with that corresponding in the list, if it is available it increments the frequency by 1, otherwise it recalls itself with the rest of the list.

-**helperBelow**, it is the same as helper right, however it works on the list sent from helper one that has the elements at position "below".

-**generateHelper**, takes 3 lists, lets say the first is (h:x:ys) and the second is (s:y:ys), first it calls findFurnitureUpdate on the element to the right of h (x), then it calls finfurnitureUpdate on the element below h (s) . then calls the main function generate to work on the rest of the list.

-**getFurnStatHelper**, the input to this function is an element and a list(statsList), the function searches for that element in statslist and if found it returns a list of the tuples it occurs in.

-**loop**, loop is a function that takes an element a number and returns a list of the element occurring n times.

**getLenOfList**, returns the total length of the input list from getPosHelper.

**getPosHelperBase**, base case if the list is empty.

**gimmeElem**, uses the number given by randomtoZeroX to returns the element in that position.

**putInListKbeerXTimes**, calls the function loop by the element and its number of occurrences/ it decomposes the “()” brackets.