In[85]:= `selection[words_] =`
    $8728.080373902008 - 0.8400752435385844 \text{ words} + 0.00019949689271781237 \text{ words}^2;$
`quick[words_]` $= 15.05794676499679 6 + 0.001671169675241757 \text{ words} -$
    $2.9212801881317814 * 10\^-9 \text{ words}^2;$
`merge[words_]` $= 12.807590932610985 + 0.0007973480826874573 \text{ words} +$
    $1.205134020616258 5 * 10\^-10 \text{ words}^2;$
`insertion[words_]` $= 4910.039017276736 - 0.4887349709532982 \text{ words} +$
    $0.00001101222646462821 8 \text{ words}^2;$
`bubble[words_]` $= 14164.567389739186 - 1.100396645066854 \text{ words} +$
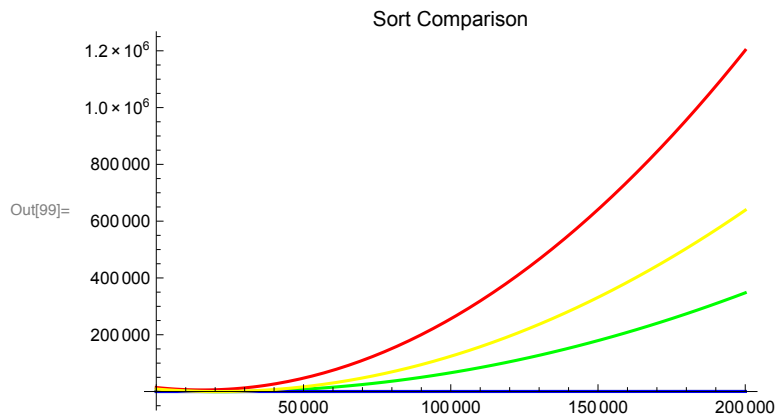 $0.0000351943245038984 2 \text{ words}^2;$

In[99]:= `Show[ Plot[bubble[words], {words, 0, 200000}, PlotStyle → Red],`
    `Plot[insertion[words], {words, 0, 200000}, PlotStyle → Green],`
    `Plot[merge[words], {words, 0, 200000}, PlotStyle → Black],`
    `Plot[quick[words], {words, 0, 200000}, PlotStyle → Blue],`
    `Plot[selection[words], {words, 0, 200000}, PlotStyle → Yellow],`
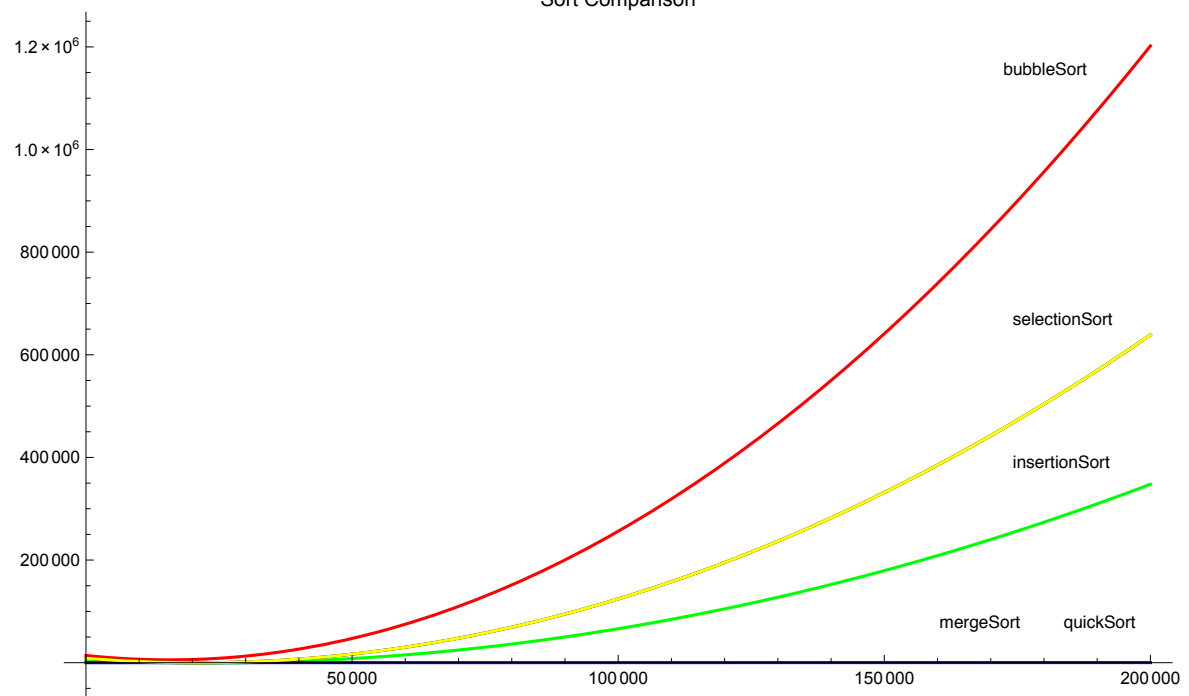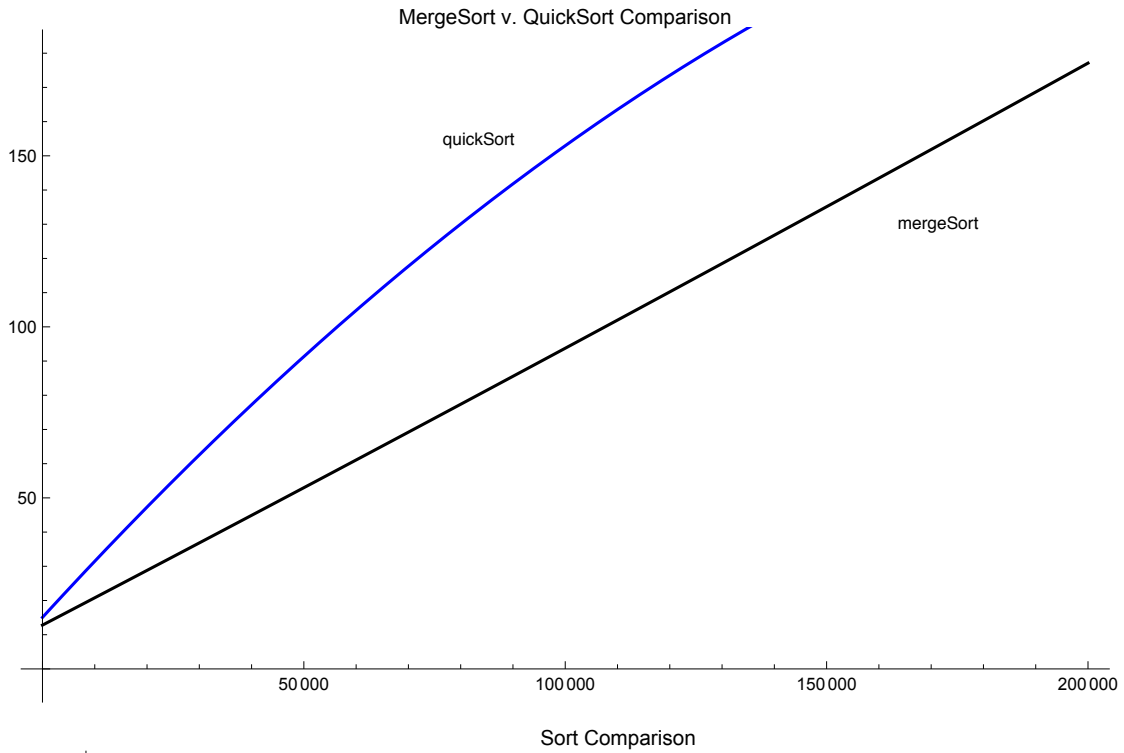   `PlotLabel → "Sort Comparison"]`

    `Show[ Plot[merge[words], {words, 0, 200000}, PlotStyle → Black],`
    `Plot[quick[words], {words, 0, 200000}, PlotStyle → Blue],`
    `PlotLabel → "MergeSort v. QuickSort Comparison"]`

Out[99]=

MergeSort v. QuickSort Comparison

quickSort

mergeSort

Sort Comparison

bubbleSort

selectionSort

insertionSort

mergeSort   quickSort

In[47]:=