



(*PESSIMISTIC *)

```
In[33]:= ListPlot[{quickComp, selectComp}, AxesLabel → "Comparisons ",  
  PlotLegends → {"QuickSort ", "QuickSelectSort "}]  
ListPlot[{quickMoves, selectMoves}, AxesLabel → "Moves",  
  PlotLegends → {"QuickSort ", "QuickSelectSort "}]  
ListPlot[{quickTime, selectTime}, AxesLabel → "Time",  
  PlotLegends → {"QuickSort ", "QuickSelectSort "}]
```

```
f[x_] := Log[x];
```

```
With[{x := 100 xp}, tab = Table[{x, f[x]}, {xp, 1, 100}]];
```

```
g[x_] := x;
```

```
With[{x := 100 xp}, tab2 = Table[{x, g[x]}, {xp, 1, 100}]];
```

```
ListPlot[{quickCompToSize / GroupBy[tab2, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n^2$  in QuickSort "}]
```

```
ListPlot[{selectCompToSize / GroupBy[tab, First → Last, Mean]],  
  PlotLegends → {"Constant near  $n \lg(n)$  in QuickSelectSort "}]
```



