Solutions to Exercise Sheet 1

Exercise 1 - Metrics

1.1 Lines of Code Metrics

i $LOC_{tot} = 74$
$LOC_{ne} = 74 - 10 = 64$
$LOC_{pars} = 64 - 15 = 49$

ii Example Haskell-Code for contrasting the given MyQuickSort.java:

```haskell
module MyQuickSort where

-- This Code is self-Documenting
quicksort :: Ord a => [a] -> [a]
quicksort []     = []
quicksort (x:xs) = smaller ++ [x] ++ bigger
  where
  smaller = quicksort [y | y <= x, y <- xs]
  bigger  = quicksort [y | y >  x, y <- xs]
```

$LOC_{parsH} = 9 - 2 = 7$
So there is LOC_{pars} with 49 as well as LOC_{parsH} with 7 (Order of magnititude: n *vs* n^2!). These are obviously two entirely different Programs, yet they are semantically equivalent (in that they)

1.2 Cyclomatic Complexity