The next example of a tcl program computes all the prime numbers up to a given limit j. For example, to obtain all the prime numbers up to 11, type simply "ns prime.tcl 11". The prime numbers example shows how to use the if command, loops, and a procedure.

```
# Usage: ns prime.tcl NUMBER
#    NUMBER is the number up to which we want to obtain
#    the prime numbers
#

if {$argc != 1} {
# Must get a single argument or program fails.
   puts stderr "ERROR! ns called with wrong number of
arguments!($argc) "

   exit 1
} else {
   set j [lindex $argv 0]
}

proc prime {j} {
   # Computes all the prime numbers till j
   for {set a 2} {$a <= $j} {incr a} {
      set b 0
      for {set i 2} {$i < $a} {incr i} {
         set d [expr fmod($a,$i)]
         if {$d==0} {
            set b 1
         }
      }
      if {$b==1} {
         puts "$a is not a prime number"
      } else {
         puts "$a is a prime number"
      }
   }
}
prime $j
```

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The next example of a tcl program computes the average to any given number of arguments.

```
if {$argc == 0} {

    puts stderr "ERROR! Ns called with no arguments! ($argc)"

    exit 1

} else {

      set result 0

   for {set i 0} {$i < $argc} { incr i} {

           set result [expr $result + [lindex $argv $i]]

}

set av  [expr $result / $argc]

puts " the Average No. is $av"
}
```

The next example of a tcl program computes the average value for ten values that will be passed during the executing of this program.

```
if {$argc != 10} {

        # Must get ten arguments or program fails.

         puts stderr "ERROR! ns called with wrong number of
arguments!($argc) "

        exit 1
}
set q 0

#create a procedure to achieve the task of comparison
between two numbers

proc big {j k} {
     global q
     if {$j >= $k} {
         set s $j
     } else {
           set s $k
     }
     if {$s >= $q} {
           set q $s
     }
     return $q
}

for {set i 0} {$i < 10} {incr i} {
     set a [lindex $argv $i]
     set b [lindex $argv [expr $i+1]]
     big $a $b
}

puts "The biggest number between the ten numbers is=\t$q"
```