```
# PROJECT 02: ENCODE TEXT AS IMAGE
# F01: IDENTIFY VALUE OF "N"
______
f01 find N <- function(input MSG, min N = 10) {
 chr array <- unlist(strsplit(input MSG, ""))</pre>
 chr len <- as.numeric(length(chr array))</pre>
 N <- min N
 flag <- TRUE
 while(flag == TRUE) {
  val chk <- N*N
   if(val chk >= chr len) {
    flag <- FALSE
    break
  else {
   N < -N + 1
   }
 }
 return(N)
}
______
# input MSG <- "Test message for this protocol."</pre>
# N <- \overline{f}01 find N(input MSG, 10)
# rm(f01_find_N)
```