Lab8

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1. Re-formate the code according to the style guide

```
prime <- function(n){
  if(n %% 1 != 0 | n < 0){
    return (FALSE)
  } else if (n == 1) {
      return (FALSE)
  } else if (n == 2) {
      return (TRUE)
  } else {
      for(i in 2:(sqrt(n))){
        if(n %% i==0){
            return (FALSE)
        }
      }
    return (TRUE)
    }
  }
```

2. Re-format and debug the function

```
find_runs <- function(x,k) {
  n=length(x)
  runs = NULL
  for(i in 1:(n-k+1)) {
    if(all(x[i:i+k-1]==1))
      runs=c(runs,i)
  }
  return (runs)
}
find_runs(c(1,0,0,1,1,0,1,1,1),2)
```

```
## [1] 3 4 6 7 8
```

3. Debug the following function

```
sort_vec = function(x) {

  if (length(x) < 2)
    return (x)

  for(last in length(x):2) {
    for(first in 1:(last - 1)) {
      if(x[first] > x[first + 1]) {
```

```
      temp <- x[first]
      x[first] <- x[first + 1]
      x[first + 1] <- temp
    }
  }
}
return(x)
}
x <- c(3,1,2)
sort_vec(x)
```

```
## [1] 1 2 3
```