My Solution

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Part 1

In how many assignment pairs does one range fully contain the other?

```
df <- read.table('./data/input.txt', sep = ',')
```

```
for (i in 1:nrow(df)){

  V1 <- unlist(strsplit(df$V1[i],"-"))
  startV1 <- V1[1]
  endV1 <- V1[2]

  V2 <- unlist(strsplit(df$V2[i],"-"))
  startV2 <- V2[1]
  endV2 <- V2[2]

  df$startV1[i] <- startV1
  df$endV1[i] <- endV1

  df$startV2[i] <- startV2
  df$endV2[i] <- endV2

}

df$startV1 <- as.numeric(df$startV1)
df$endV1 <- as.numeric(df$endV1)
df$startV2 <- as.numeric(df$startV2)
df$endV2 <- as.numeric(df$endV2)

df2 <- df
```

```
pairs <- 0

for (i in 1:nrow(df)){

  if ((df$startV1[i] <= df$startV2[i]) && (df$endV1[i] >= df$endV2[i])){
    pairs <- pairs + 1
    df$overlaps[i] <- TRUE
  }
```

```
  else if ((df$startV2[i] <= df$startV1[i]) && (df$endV2[i] >= df$endV1[i])){
    pairs <- pairs + 1
    df$overlaps[i] <- TRUE
  }
  else{
    df$overlaps[i] <- FALSE
  }
}

print(pairs)
```

```
## [1] 562
```

Part 1 Complete

There are 562 assignment pairs in which one range fully contains the other.

Part 2

In how many assignment pairs do the ranges overlap at all? (One does not have to completely contain the other)

```
pairs <- 0

for (i in 1:nrow(df2)){

  if ((df2$startV1[i] < df2$startV2[i]) && (df2$endV1[i] < df2$startV2[i])){
    df2$overlaps[i] <- FALSE
  }
  else if ((df2$startV2[i] < df2$startV1[i]) && (df2$endV2[i] < df2$startV1[i])){
    df2$overlaps[i] <- FALSE
  }
  else{
    pairs <- pairs + 1
    df2$overlaps[i] <- TRUE
  }
}

print(pairs)
```

```
## [1] 924
```

Part 2 Complete

There are 924 assignment pairs in which any overlap occurs.