

# AOC Day 1

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## Source

The source data

```
tmp <- read.table("~/AoC_2024/day_01/test_1.txt")
# tmp

dat <- read.table("~/AoC_2024/day_01/source_1.txt")
# head(dat)
```

Sort columns,

subtract and sum abs values

```
tmp[,1] <- sort(tmp[,1])
tmp[,2] <- sort(tmp[,2])
res <- (tmp[,1] - tmp[,2])
sum(abs(res))
```

```
## [1] 11
```

```
tmp[,1] <- sort(tmp[,1])
tmp[,2] <- sort(tmp[,2])
res <- (tmp[,1] - tmp[,2])
sum(abs(res))
```

```
## [1] 11
```

now similarity:

defined as

```
tmp <- dat
nobs = length(tmp[,1])
out <- numeric(nobs)
for(ii in 1:nobs){
  foo <- tmp[ii,1]*sum(tmp[ii,1]==tmp[,2])
  out[ii] <- foo
  # print(foo)
}
sum(out)
```

```
## [1] 25358365
```