# ex_01

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## Aufgabe 1

### b) Euclid's greatest common denominator

```r
euclid <- function(m, n) {
  checkmate::assertIntegerish(m, lower = 0, any.missing = FALSE, len = 1)
  checkmate::assertIntegerish(n, lower = 0, any.missing = FALSE, len = 1)
  if (n == 0) return(m)
  if (m == 0) return(n)
  cat(n, m, "\n")
  if (m <= n) {
    return(euclid(m, n %% m))
  } else {
    return(euclid(m %% n, n))
  }
}

euclid(270, 192)
```

```
## 192 270
## 192 78
## 36 78
## 36 6
```

```
## [1] 6
```