## Symmetric Matrix From Half-Vectorization

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```
library(linearAlgebra)
```

```
A <- matrix(c("a", "b", "c"), ncol = 2)
A

## [,1] [,2]
## [1,] "a" "b"
## [2,] "b" "c"

vech_i <- c("a", "b", "c")
vechs_i <- "b"
diags_i <- c("a", "c")</pre>
```

## Symmetric Matrix From Half-Vectorization

## From Half-Vectorization

```
sym_of_vech(vech_i)

## [,1] [,2]

## [1,] "a" "b"

## [2,] "b" "c"
```

## Symmetric Matrix From Strict Half-Vectorization

```
sym_of_vechs(vechs_i, diags = diags_i)

## [,1] [,2]
## [1,] "a" "b"
## [2,] "b" "c"
```