```
> with(LinearAlgebra):
> A := Matrix([[1, 1], [1, 1]]):
> J, Q := JordanForm(A, output = [J, Q])
```

$$J, Q := \begin{bmatrix} 0 & 0 \\ 0 & 2 \end{bmatrix}, \begin{bmatrix} \frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} \end{bmatrix} \quad (1)$$

```
> diag := Matrix([[0, 0], [0, sin(2)]]):
> result := Q . diag . Transpose(Q)
```

$$result := \begin{bmatrix} \frac{\sin(2)}{4} & \frac{\sin(2)}{4} \\ \frac{\sin(2)}{4} & \frac{\sin(2)}{4} \end{bmatrix} \quad (2)$$

```
> restart: with(LinearAlgebra):
  A := Matrix([[0, 1], [0, 0]]):
> J, Q := JordanForm(A, output = [J, Q])
```

$$J, Q := \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}, \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \quad (3)$$

```
> diag := Matrix([[0, 0], [0, sin(2)]]):
> result := Q . diag . Transpose(Q)
```

$$result := \begin{bmatrix} 0 & 0 \\ 0 & \sin(2) \end{bmatrix} \quad (4)$$

```
>
```