

## Code Generation

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The [CodeGeneration](#) package offers new support for translating Maple code to the [Swift programming language](#).

### ▼ Swift

With [CodeGeneration\[Swift\]](#), you can translate expressions to code fragments:

> *with(CodeGeneration) :*

> *Swift( $\sqrt{a^2 + b^2 + c^2}$ )*

```
cg = sqrt(a * a + b * b + c * c)
```

You can also translate procedures and larger programs.

> *Swift(m → add(i, i = 1 .. m))*

```
func cg0 (m: Int32) -> Int32 {  
    var r: Int32  
    r = 0  
    for i in 1...m  
    {  
        r = r + i  
    }  
    return(r);  
}
```