

1 The Module leap.pl

```
divides(+Divisor:int, +Number:int)
```

leap.pl

Number is a multiple of *Divisor*.

Use the same precedence and type as *rem* and similar operators.

```
:- module(leap).
```

```
:- op(400, yfx, divides).
```

```
divides(Divisor, Number) :-
```

0 is the remainder of $Number \div Divisor$.

```
0 is Number rem Divisor.
```

```
leap(+Year:int)
```

leap.pl

Year is a leap year.

If 400 divides *Year*, it is a leap year. Stop looking for alternatives.

```
leap(Year) :- 400 divides Year, !.
```

If 100 does not divide *Year* and 4 does, it is a leap year.

```
leap(Year) :-
```

```
\+ 100 divides Year,
```

```
4 divides Year.
```