

Divisible By Function

Divisible by 3

We could write a program to check if a number is evenly divisible by the number 3 by taking the `IsEven` function and instead of checking if there is a remainder when dividing by 2, we check if there is a remainder by dividing by 3 instead:

IsDivisibleBy3 FUNCTION

```
def IsDivisibleBy3(InputNumber):
    if (InputNumber % 3) == 0:
        ReturnValue = True # Divisible by 3
    else:
        ReturnValue = False # Not divisible by 3
    # EndIf;

    return ReturnValue
# END IsDivisibleBy3.
```

And the main part of the program could say something like:

```
print(IsDivisibleBy3(15))
```

And we would get the following output:

```
True
```

Divisible by N

If we wanted to make the program more general, we could use it to check if a number is evenly divisible by any other number, all we need to do is pass a second value into the function, in this case N, and doing a division of the `InputNumber` by N (we call in input values “parameters”, and in this case, there are two parameters):

IsDivisibleByN FUNCTION

```
def IsDivisibleByN(InputNumber, N):
    if (InputNumber % N) == 0:
        ReturnValue = True # Divisible by N
    else:
        ReturnValue = False # Not divisible by N
    # EndIf;

    return ReturnValue
# END IsDivisibleByN.
```

And the main part of the program would have to take in two values, for example:

```
print(IsDivisibleByN(15, 2))
```

We will get the following output:

```
False
```

And if we did `print(IsDivisibleByN(15, 3))` we would get back `True`.

#PythonMonday © Damian Gordon