

Perl 6.d (Diwali)

Coming November 6, 2018

New in 6.d: Major Set Operator Improvements

The 6.c spec was fairly loose when it came to set operators, especially when it came to mixing the different QuantHash types in the same call.

Does the call `Set (-) Bag` return a `Set` or a `Bag` type? The 6.d spec clarifies that.

```
say <a b c>.Set (-) <d e f b>.Bag  
# OUTPUT: «Bag(a, c)»
```

In addition, the Rakudo compiler had seen great performance improvements with set operators, especially when using them on non-QuantHash types, such as regular Lists and Hashes, which makes them a lot more useful in programs:

```
my @needles = 1, 2, 3, 10, 100;  
my @haystack = ^1000 .pick: 600;  
  
@needles ⊆ @haystack for ^1000;  
say now - ENTER now  
  
# OUTPUT on Rakudo 2015.12: «20.1532034»  
# OUTPUT on Rakudo 2018.09: «0.4214398» (47.82x as fast)
```

