

```
newtype Prime a = Prime a deriving Show
instance (Integral a, Arbitrary a) => Arbitrary (Prime a) where
  arbitrary = do
    x <- frequency [ (30, choose (0, 1000))
                     , (30, choose (1001, 2000))
                     , (40, choose (2001, 3000))
                   ]
    return $ Prime (primes !! x)
```