

U57KYFW67 : Let $\pi = 3$. Then $\pi = 3$. I have shadowed the variable π . Not good practice, but you can't say I'm wrong, because I just gave a definition for what I mean by π .

U57KYFW67 : The only thing is that some variables have historical importance, and are used nearly universally in certain ways. But that's convention, not logic.

U23SA861Y : we colloquially refer to archimedes constant as pi because its frequent use as the symbol. But the constant itself doesn't change

U57KYFW67 : A good example is something like e , the Euler-Mascheroni constant. Surely e is used in lots of ways, but it is also an important naturally-occurring number -- not all that different from π .

U23SA861Y : the concept of a fixed ratio between a diameter and a circumference that is the constant.

U57KYFW67 : jonf: Just taking this aside, since it's not programming-related. But if you look at situations like multiple integrals, you can have "constants" which "vary" Like $\int y dx dy$ (taken over, say, a rectangle) which is equal to $\int y (\int x dx) dy$. We say the variable y is constant with respect to x . It's treated as constant because when you zoom in on the inner integral " $\int y dx$ ", you can see the quantifier for x (the " dx " in a sense brings the variable x into existence), but you can't see the quantifier for y until you zoom back out.

U23SA861Y : y isn't a constant in that scenario it is a variable of the inner function $f(y,x)=xy$ you are simply recognizing that there exists an identity $g(y) = \int xy dx = y * \int x dx$

U57KYFW67 : Right. But that requires a global perspective. Locally, (when you confine your analysis to just the inner scope) it acts in all ways exactly like a constant.

U57KYFW67 : The perspective I'm arguing here is useful if you're, say, writing a compiler, and you want to concern yourself with local data whenever possible.

U57KYFW67 : But ultimately, you can take different perspectives on it.

U5ABF3BH7 : <@U23SA861Y> thanks for helping me earlier. I am not fetching the data though. The decoder isn't doing its job and I get an empty list when I shouldn't. Would you might taking a look to see if you catch some error in my code? Going to the url "cases/frontend/all_rolodex" fetches the data so the error isn't there.

```
...  
  
entryDecoder = Json.Decode.map2 Types.RolodexEntry (Json.Decode.field "id"  
<http://Json.Decode.int|Json.Decode.int>) (Json.Decode.field "name" Json.Decode.string)  
  
categoryDecoder = Json.Decode.map2 Types.RolodexList (Json.Decode.field "category" Json.Decode.string)  
(Json.Decode.field "list" (Json.Decode.list entryDecoder))
```

```
getRolodexLists =  
  Json.Decode.list categoryDecoder  
    |&gt; Http.get "cases/frontend/all_rolodex"  
    |&gt; Http.send Types.LoadRolodexLists
```

```
...  
...  
  
type alias RolodexList =  
  { category : String  
  , list : List RolodexEntry }
```

```
type alias RolodexEntry =  
  { id : Int  
  , name : String }
```

```
...  
...  
  
Types.LoadRolodexLists (Ok rolodexLists) -&gt;  
  ({ model | rolodexCategoriesAndEntries = rolodexLists}, Cmd.none)
```

```
Types.LoadRolodexLists (Err _) -&gt;  
  (model, Cmd.none)  
...
```

U5ABF3BH7 : I also get the data with ``Cmd.batch [..., ..., getRolodexLists]

U153UK3FA : <@U5ABF3BH7> are you sure the http request isn't erroring?

U153UK3FA : what does the json from the response look like?

U3HQVHERX : Could someone provide me with an example of `uniqueBy : (a -> comparable) -> List a -> List a`?

U3HQVHERX : Like `unique [1,1,2] == [1,2]`

U3HQVHERX : `unique ?? [1,1,2] == [1,2]`

U3HQVHERX : from List.Extra

U57KYFW67 : <@U3HQVHERX> I don't know if this is right, but my guess would be something like `unique (\p -> p.age) personList`

U57KYFW67 : or to be a bit more concrete, `unique (\x -> abs x) [-1, 2, -3, 4, 1, -2]`

U236M9FH9 : :point_up: