

Tutorial Aug 20 2017

Give types of:

- 1
- '1'
- "1"
- "1"+"1"
- "1"+[ord.'1']
- 2 :: 2
- [2] :: 2
- 2 :: [2]
- [2] ++ [1]
- (++).[2]
- (++) .2.[1,2]
- (++) .[2].[1,2]
- ord.1
- ord
- (:: [1])
- ([1] ::)
- chr.65

Define inductively with type:-

filter1 which is used as follows

? **filter1**.even.list1

And that should give same value as $[x|x \leftarrow \text{list1}, \text{even}.x]$

? **filter1**.odd.list1

And that should give same value as $[x|x \leftarrow \text{list1}, \text{odd}.x]$

In general it can be defined as

filter1.p.list1=[x|x<-list1; p.x]

Give an inductive definition equivalent to this definition