quiz1

Due May 22, 2020 at 10:01am **Points** 20 **Questions** 20
Available May 22, 2020 at 10:01am - May 22, 2020 at 10:30am 29 minutes
Time Limit 22 Minutes

This quiz is no longer available as the course has been concluded.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	6 minutes	16 out of 20

Correct answers are hidden.

Score for this quiz: **16** out of 20
Submitted May 22, 2020 at 10:21am
This attempt took 6 minutes.

Question 1 — 1 / 1 pts

The type of [] is of

- list of sublists
- type undefined
- a list of any types
- Int

Question 2 — 1 / 1 pts

[1,2,3,4,5 :[3]] is equivalent to

- [1,2,3,4,5,5,5]

- [1,2,3,4,5]
- [[1,2,3,4,5],[3,4,5]]
- [1,2,3,4,5,3]

Question 3

1 / 1 pts

h x y _ = y

Start = h 10 20 30

is equal to

- 20
- 10
- 30
- 60

Incorrect

Question 4

0 / 1 pts

zip [1..2] [15..18]

- ([1,15],[2,16])
- [(1,15),(2,16)]
- [1,15,2,16]
- [(15,1),(16,2)]

Question 5

1 / 1 pts

repeat 10

- [10..19]
- [11..20]
- [10,10,10,..]
- [10,10,10,10,10,10,10,10,10,10]

Question 6

1 / 1 pts

```
:: Tree a = Node a (Tree a) (Tree a)
          | Leaf

f:: (Tree a) -> Int
f Leaf = 1
f (Node x le ri) = 1 + f le + f ri
```

- counts subtrees only
- counts leaves only
- counts nodes and leaves
- counts nodes only

Question 7

1 / 1 pts

iterate inc 5

- [6,7,8,..]
- [5,5,5,5,5]
- [5,6,7,8,..]
- [5,6,7,8,9]

Question 8

1 / 1 pts

```
AnArray = {1,10,2,9}
```

```
{inc e \\ e <-: AnArray}

result is
```

- [2]
- {2,11,3,10}
- {2,10,2,9}
- {1,11,2,9}

Incorrect

Question 9

0 / 1 pts

```
mapbtree              :: (a -> b) (BTree a) -> BTree b
mapbtree f (Tip x)       = Tip (f x)
mapbtree f (Bin t1 t2)   = Bin (mapbtree f t1) (mapbtree f t2)
```

mapbtree applies a function to

- every node and leaves
- every right subtree
- every leaf
- every node

Incorrect

Question 10

0 / 1 pts

Which one is false for records?

- the elements are numbered by index
- fields in a record are indicated by their name
- fields can have different types
- it has fixed number of fields

Question 11

1 / 1 pts

What is an algebraic type?

- giving a new name to an existing type
- a basic type
- a type that defines the way elements can be constructed
- a type of which the actual definitions is hidden

Question 12

1 / 1 pts

Trees can't have

- none of the answers are correct
- information in leaves
- same types for nodes
- different types between nodes and leaves

Incorrect

Question 13

0 / 1 pts

x rem 2 == 0 is of type

- Bool
- [Bool]
- Int
- Real

Question 14

1 / 1 pts

take 10 [1..] is of length

- 0
- infinite
- 10
- not defined

Question 15

1 / 1 pts

The ++ operator

- adds elements
- adds 1
- creates sublists
- concatenates lists

Question 16

1 / 1 pts

prod [1..5] is

- 5
- 15
- 10
- 120

Question 17

1 / 1 pts

```
fib n = fib (n - 1) + fib (n - 2)
is wrong because
```

- infinite recursion
- n not defined
- is equal to 0
- repeats fib calls

Question 18

1 / 1 pts

[] ++ [1..5] is

- []
- [1,5]
- [1,2,3,4,5]
- [1]

Question 19

1 / 1 pts

foldr (+) 1 [1..3] is

- 0
- 1
- 6
- 7

Question 20

1 / 1 pts

map (\ x = x*2) [4,16]

- []
- [8,32]
- [8,20]
- [2,4]

Quiz Score: **16** out of 20