

Time left 0:11:14

Question 1

Not yet
answered

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1.00

Flag question

Given the following parser:

```
p = number `andThen` many (pThen (char ',') number)
```

Select the inputs that will successfully parse (i.e. will yield Success _).

Note: the parser doesn't have to consume all of the input in order to yield the Success variant!

Hint: Try to express in words (natural language) what the parser does before considering the inputs below.

☒ a. 1,2,3

☒ b. 123,4,5,abc

☒ c. 123,4,5,

☒ d. 1

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Question 2

Not yet
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Flag question

Given the following combinator:

```
rep :: Int -> Parser a -> Parser [a]
rep 0 p = succeed []
rep n p = pMap (\(a, as) -> a:as) $ andThen p (rep (n-1) p)
```

That applies a given parser a fixed number of times and returns the results in a list.

Select the parser definition that would yield:

`Success ("123", "")`

for the following input:

`AA1BB2CC3`

i.e. `runParser p input == result`

Hint: Try to find a pattern in the input and connect that with the output before considering the parser definitions below!

- ☐ a. `p = rep 3 (andThen (rep 2 upper) digit)`
- ☒ b. `p = rep 3 (pThen (pThen upper upper) digit)`
- ☐ c. `p = rep 3 (andThen (pThen upper upper) digit)`
- ☐ d. `p = andThen s (andThen s s) where
ld = (pThen (pThen upper upper) digit)`

Question 4

Get

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g question

Select the function signature that **best** represents a parser

- ☐ a. `String -> a`
- ☒ b. `String -> Result ParseError (a, String)`
- ☐ c. `[Int] -> Result Int a`
- ☐ d. `String -> Result ParseError a`

5

d

out of

question

Which of the following names would best describe the following parser:

```
satisfies (`elem` ['0'..'9'])
```

- ☐ a. upper
- ☐ b. lower
- ☒ c. digit
- ☐ d. char

Question 3

Not yet
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1.00

Flag question

Select the function that is the equivalent of the following function written in do notation

```
fn = do
  putStrLn "Line to reverse"
  line <- getLine
  putStrLn (reverse line)
```

*>> = append function see an arg
>> 2 arguments, return the second
while still running
the first one*

- ☒ a. `putStrLn "Line to reverse" >> getLine >>= \line -> putStrLn (reverse line)`
- ☐ b. `putStrLn "Line to reverse" >>= getLine >>= \line -> putStrLn (reverse line)`
- ☐ c. `putStrLn "Line to reverse" >> getLine >> \line -> putStrLn (reverse line)`
- ☐ d. `putStrLn "Line to reverse" >>= getLine >>= putStrLn (reverse line)`

Question 7

Not yet
answeredMarked out of
1.00

Flag question

Given the following combinator:

```
rep :: Int -> Parser a -> Parser [a]
rep 0 p = succeed []
rep n p = pMap \(a, as) -> a:as $ andThen p (rep (n-1) p)
```

That applies a given parser a fixed number of times and returns the results in a list.

Select the parser definition that would yield:

Success ("ab", "3")

for the following input:

ab123

i.e. runParser p input == result

Hint: Try to find a pattern in the input and connect that with the output before considering the parser definitions below!

- ☐ a. $p = p\text{Then } (p\text{Then lower lower}) (p\text{Then digit digit})$
- ☐ b. $p = p\text{Map } \lambda(a, b) \rightarrow a ++ b \$ \text{andThen } (\text{rep } 2 \text{ lower}) (\text{rep } 2 \text{ digit})$
- ☒ c. $p = p\text{Map fst } \$ \text{andThen } (\text{rep } 2 \text{ lower}) (\text{rep } 2 \text{ digit})$
- ☐ d. $p = p\text{Then } (\text{rep } 2 \text{ lower}) (\text{rep } 2 \text{ digit})$

Select all the **false** statements about Input/Output in Haskell

- ☒ a. To obtain a line from the standard input, we can write

do

```
name <- getLine
```

```
putStrLn name
```

- ☒ b. Haskell's *main* function has the signature *main :: IO ()*

- ☐ c. To read data from a file we use the read function

- ☐ d. do notation can be only used with the IO monad

readFile for files
works with every monad