CS350 2024-25 Sem I

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Outline

Lecture 2 contents

How do we classify Haskell?

- ▶ statically scoped
- ▶ statically typed
- ▶ lazy semantics
- ▶ functional language
- ▶ with automatic type inference

Primitive data types and operations

Numeric data type

Equality == and Inequality /= operator

Logical operators : &&, ||, ~

Infix operators

List manipulation in Haskell

Examining types in Haskell

Functions in Haskell - introduction

defining and applying simple functions

Multi-argument functions

Functions with list arguments

Pattern-matching

Length of a list

Reversing a list

Polymorphism

Try equality on lists!

Length

Higher-order programming with functions

Map

Filter

Fold

Understand the composition function in base

- ▶ Type :browse
- ▶ Find the function (.)
- ▶ Understand its type
- ▶ From its type we can infer its function

A Problem to think about

Where to find help

- ► Type :t to find the type of a function
- ► Type :i to find basic information
- ► Type :browse <module> to find list of functions in the module
- ► Type :doc