

COMP6991 23T1

Polymorphism

Smallest Value

Example time!

> **Example: `generics.rs`**

Notes:

> **Becoming generic**

> **Monomorphization**

> **Generic container**

Type parameters as type constructors

- > What is the type ``Option``?
- > `Ty -> Ty`
- > Types as restrictions

Traits

Common Std Traits

General

> **Default**

> **Copy**

> **Clone**

Common Std Traits

Formatting

- > **Debug**
- > **Display**
- > **ToString**

Common Std Traits

Operators

- > `PartialEq (& Eq)`
- > `PartialOrd (& Ord)`
- > `Add (& AddAssign)`
- > `BitAnd (& BitAndAssign)`
- > ...

Common Std Traits

Conversion

> **From**

> **Into**

> **TryFrom**

> **TryInto**

> **FromStr**

> **AsRef (& AsMut)**

> **Borrow (& BorrowMut)**

> **ToOwned**

Common Std Traits

Error

> **Error**

Common Std Traits

Iteration

- > **Iterator**
- > **IntoIterator**
- > **FromIterator**

Iterator trait

Fibonacci

Example time!

> **Example: `iter.rs`**

MyVecIter

Example time!

> **Example: `iter.rs`**

Trait objects