

COMP6991 23T3

Polymorphism

Smallest Value

Example time!

> Example: `generics.rs`

Notes:

- > Becoming generic
- > Monomorphization
- > Generic container

Type parameters and 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