

POLYMOR MPHISM VS OVERLOADING

- Parametric Polymorphism



- single algorithm may be given many types.

- type variable may be replaced by any type

- if f:t>t then f: int > int, f: bool-shool,

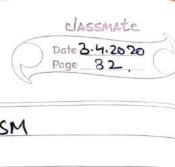
Overloading

- a single symbol may refer to more than one algorithm.

teach algorithm may have different type.

- choice of algorithm determined by type context.

- types of symbol may be arbitrarily elifterent.



VARIETIES OF POLYMORPHISM

- parametric polymorphism
 a single piece of code is typed generically.
 - · imperative / 1st class polymorphism
 - · ML-style / let polymorphism
 - ad-hoc polymorphism

 the same expression exhibit different
 - behaviours when viewed in different types.
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 - e intentional polymorphism.
 - a single term may have many types using the rule of Subsumption, allowing to selectively forget information.

subtype polymorphism