

# Variant Type Applications Solutions

# std::visit()

- Briefly describe std::visit()
  - std::visit() can be used to access an element
  - It takes a callable object and the element
  - It applies the callable object, with the in-use alternative of the element as argument

# Visitor

- What is meant by a "visitor", in the context of `std::visit()`?
  - The visitor is the callable object which is passed to `std::visit()`
- How can we obtain a "visitor"?
  - The simplest way is to write a functor
  - The operator `()` of the functor is overloaded for each alternative type in the variant
- Write a program which creates an `std::vector` of variants and uses `std::visit()` to print out the data from each variant