UnitConv

UNIT CONVERTER

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Introduction

- ➔ UnitConv is a Command-Line Unit Converter with multiple unit conversions.
- ➔ It supports conversions between combinations of units. The input and the result can consist of various units and this conversion is enumerated in one step, e.g. a length measured in yards, feet and inches into the length in meters and centimetres.

Supported Unit Conversions

Supported Conversion Types

1. Length
2. Temperature
3. Weight
4. Area
5. Volume

Concepts used in this Project

- **CLASSES & OBJECTS –** A Class is a user defined data-type which has data members and member functions. Data members are the data variables and member functions are the functions used to manipulate these variables and together these data members and member functions defines the properties and behaviour of the objects in a Class.

  An Object is an instance of a Class. When a class is defined, no memory is allocated but when it is created, memory is allocated.

- **OPERATOR OVERLOADING (Polymorphism) –** C++ has the ability to provide the operators with a special meaning for a data type, this ability is known as operator overloading.

Concepts used in this Project

- **INHERITANCE –** The capability of a class to derive properties and characteristics from another class is called Inheritance. Inheritance is one of the most important feature of Object Oriented Programming.
- **CONSTRUCTOR & DESTRUCTOR –** A constructor is a member function of a class which initializes objects of a class. In C++, Constructor is automatically called when object is created.

  Destructor is a member function which destructs or deletes an object. A destructor function is called automatically when the object goes out of scope : (1) the function ends (2) the program ends

Concepts used in this Project

- **ABSTRACTION –** Abstraction means displaying only essential information and hiding the details.
- **NAMESPACE –** Namespaces allow us to group named entities that otherwise would have global scope into narrower scopes, giving them namespace scope. This allows organizing the elements of programs into different logical scopes referred to by names.
- **SWITCH CASE –** Switch case statement is used when we have multiple conditions and we need to perform different actions based on the condition.

Concepts used in this Project

- **IF-ELSE STATEMENT –** It is used to execute some statement code block if the expression is evaluated to true, otherwise executes else statement code block.
- **ENCAPSULATION –** Binding data members and member functions in one unit known as a class. With the help of this concept, data is not accessible to the outside world and only those functions which are declared in class can access it.

Key Features

- ➔ Supports multiple conversions
- ➔ Easy to use
- ➔ Conversion is enumerated in one step