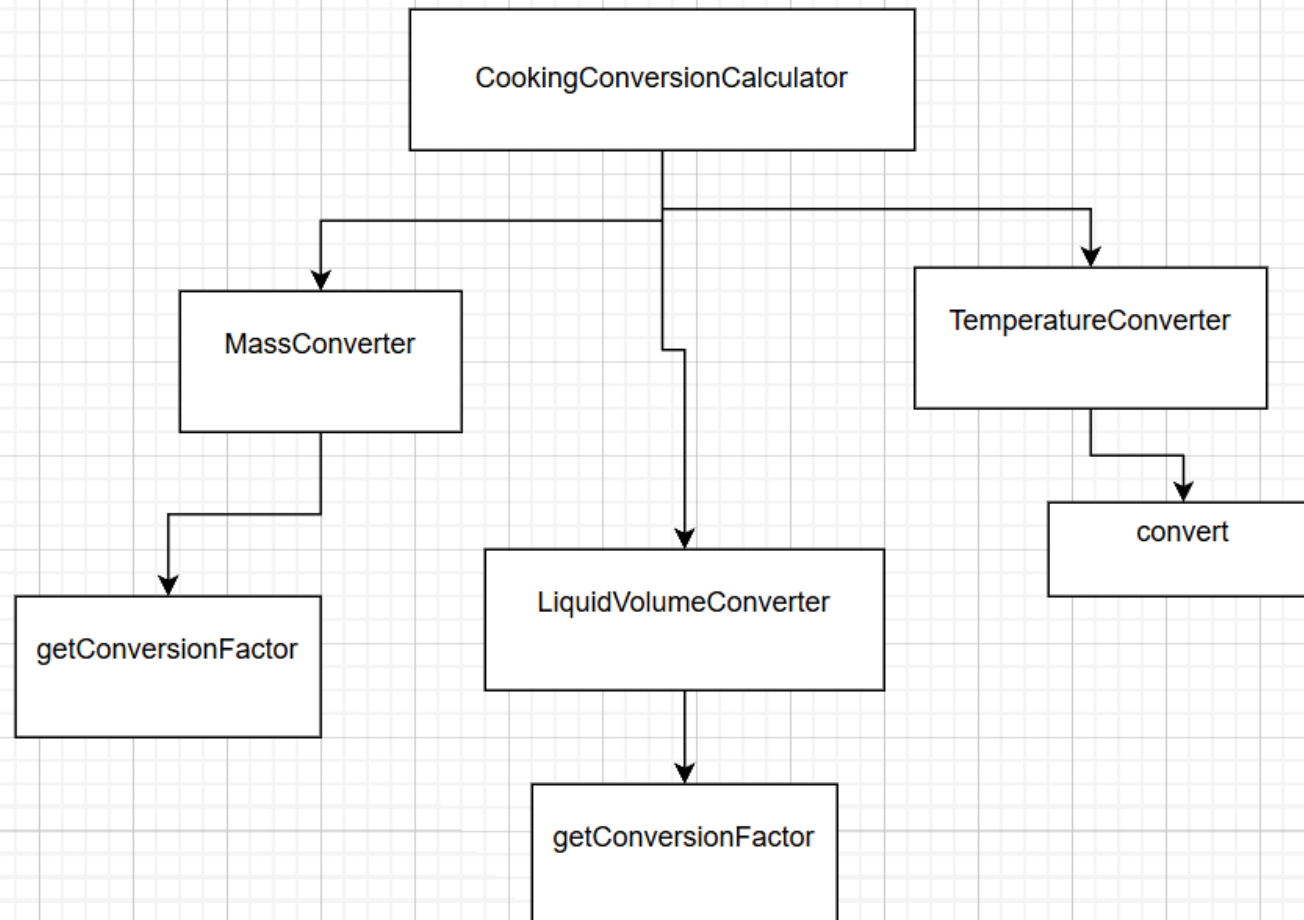# Program Structure

Top-down Integration

Unit under test	List of Stubs/Drivers	Input	result	Stub's return value	Expected results	Actual results	Pass/Fail/ No run
TD-TEMP-1 CookingConversionCalculator.convert	Stub TemperatureConverter.convert	choice=temperature, value=10, fromUnit =fahrenheit, toUnit=celsius	999.99	999.99	999.99	-0.0	Fail
TD-MASS-1 CookingConversionCalculator.convert	Stub MassConverter.convert	choice=mass, value=1, fromUnit=cup, toUnit=gram	222.22	222.22	222.22	125.0	Fail
TD-LIQ-1 CookingConversionCalculator.convert	Stub LiquidVolumeConverter.convert	choice=liquid, value=1, fromUnit =liter, toUnit=quart	123.456	123.456	123.456	1.057	Fail

TD-UNKW-1 CookingConversionCalculator.convert	-	choice=pressure, value=10, fromUnit =pascal, toUnit=bar	-	-	0.0	0.0	Pass

Bottom-up Integration

Unit under test	List of Stubs/Drivers	Input	result	Stub's return value	Expected results	Actual results	Pass/Fail/ No run
BU-MASS -1 MassConverter.convert	Drivers :JUnit test	value=1, fromUnit=cup , toUnit=gram	-	-	125	125	Pass
BU-MASS -2	Drivers :JUnit test	value=2, fromUnit	-	-	16	16	Pass

MassConverter.convert		=tablespoon, toUnit=gram					
BU-MASS-3 MassConverter.convert	Drivers :JUnit test	value=4, fromUnit=oz, toUnit=gram	-	-	113.396	113.396	Pass
BU-MASS-4 MassConverter.convert	Drivers :JUnit test	value=5, fromUnit =pound, toUnit =kilogram	-	-	2.27	2.27	Pass
BU-MASS-5 MassConverter.convert	Drivers :JUnit test	value=1000, fromUnit =gram, toUnit=oz	-	-	35.0	35.0	Pass

BU-MASS-6 MassConverter.convert	Drivers :JUnit test	value=2, fromUnit =kilogram, toUnit=pound	-	-	4.41	4.41	Pass
BU-LIQ-1 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit=cup, toUnit=ml	-	-	250	250	Pass
BU-LIQ-2 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit=cup, toUnit=oz	-	-	8	8	Pass
BU-LIQ-3 LiquidVolumeConverter.convert	Drivers :JUnit test	value=2, fromUnit =tablespoon, toUnit=ml	-	-	30	2	Fail
BU-LIQ-4	Drivers :JUnit test	value=1, fromUnit=oz, toUnit=ml	-	-	29.574	29.574	Pass

LiquidVolumeConverter.convert							
BU-LIQ-5 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit=pint, toUnit=ml	-	-	473.176	473.176	Pass
BU-LIQ-6 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit =quart, toUnit=liter	-	-	0.946	0.946	Pass
BU-LIQ-7 LiquidVolumeConverter.convert	Drivers :JUnit test	value=100, fromUnit=ml, toUnit=oz	-	-	3.4	3.4	Pass
BU-LIQ-8 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit =liter, toUnit=pint	-	-	2.113	2.113	Pass
BU-LIQ-9	Drivers :JUnit test	value=1, fromUnit	-	-	1.057	1.057	Pass

		=liter, toUnit=quart					
LiquidVolumeConverter.convert		=liter, toUnit=quart					
BU-LIQ-10 LiquidVolumeConverter.convert	Drivers :JUnit test	value=1, fromUnit =liter, toUnit=gallon	-	-	0.264	0.264	Pass
BU-TEMP -1 TemperatureConverter.convert	Drivers :JUnit test	value=32, fromUnit =fahrenheit, toUnit=celsius	-	-	0	0	Pass
BU-TEMP -2 TemperatureConverter.convert	Drivers :JUnit test	value=212, fromUnit =fahrenheit, toUnit=celsius	-	-	100	0	Fail
BU-TEMP -3 TemperatureConverter.convert	Drivers :JUnit test	value=0, fromUnit =celsius, toUnit =fahrenheit	-	-	32	0	Fail

BU-TEMP-4 TemperatureConverter.convert	Drivers :JUnit test	value=100, fromUnit =celsius, toUnit =fahrenheit	-	-	212	0	Fail
BU-TEMP-5 TemperatureConverter.convert	Drivers :JUnit test	value=-40, fromUnit =fahrenheit, toUnit =celsius	-	-	-40	0	Fail
BU-CALC-1 CookingConversionCalculator.convert	Drivers :JUnit test	choice=mass, value=2, fromUnit =kilogram, toUnit=pound	-	-	4.41	4.41	Pass
BU-CALC-2 CookingConversionCalculator.convert	Drivers :JUnit test	choice=liquid, value=1, fromUnit =quart, toUnit=liter	-	-	0.946	0.946	Pass

BU-CALC-3 CookingConversion Calculator. convert	Drivers :JUnit test	Choice =temperature , value=32, fromUnit =fahrenheit, toUnit=celsius	-	-	0	0	Pass
BU-CALC-4 CookingConversion Calculator. convert	Drivers :JUnit test	Choice =temperature , value=212, fromUnit =fahrenheit, toUnit=celsius	-	-	100	0	Fail
BU-CALC-5 CookingConversion Calculator. convert	Drivers :JUnit test	Choice =pressure, value=10, fromUnit =pascal, toUnit=bar	-	-	0.0	0.0	Pass