

# HackSlash Team Gray-Interface

## Recruitment Task :-

We are intending to design a calculator which will implement two classes; one being 'Simple' which is the base class and contains methods to perform basic arithmetic namely +,-,/,\* and display.

The second one being 'Complex' which will inherit 'Simple' and perform complex number calculations.

There are a few specifications to take into account while designing the above:-

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i> Simple class will have overloaded constructor to initialize either 2 operands (for simple arithmetic) or 4 operands (for complex arithmetic).

[Hint: use \*args and \*\*kwargs]

ii> Complex class overrides the 'display' method of Simple class.

iii> Complex class has overloaded +,-,\*and/ operators to perform complex calculations and return Real and Imaginary part of the result together which will be printed by the 'display' function.

iv> A user-defined exception named 'NegValException' has to be thrown if any of the incoming operands are negative and program terminates.

v> In the driver code display a menu-driven interface and accordingly create object of 'Simple' or 'Complex' class and take inputs.

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