

Finance 5350 - Homework Assignment 4

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Assignment 4

For this assignment your job is to implement the Black-Scholes-Merton model as part of the `dylan` option pricing module.

You should have already forked the `dylan` module and have a locally cloned copy of the repository.

The first step is to create a class that inherits from the `PricingEngine` abstract based class as follows:

```
class AnalyticEngine(PricingEngine):
    def __init__(self, payoff_type, pricer):
        self.__payoff_type = payoff_type
        self.__pricer = pricer

    @property
    def payoff_type(self):
        return self.__payoff_type

    @payoff_type.setter
    def payoff_type(self, new_payoff_type):
        self.__payoff_type = new_payoff_type

    def calculate(self, option, data):
        return self.__pricer(self, option, data)
```