

## Level 9 Homework

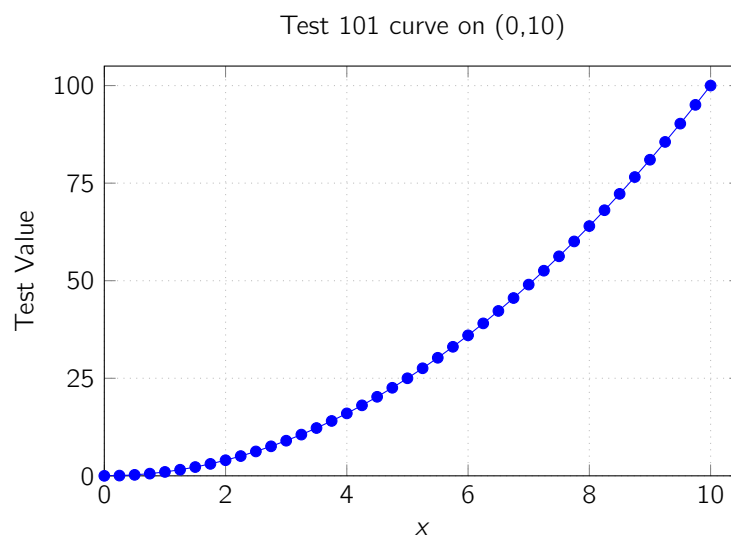
### Group E: Excel Visualization

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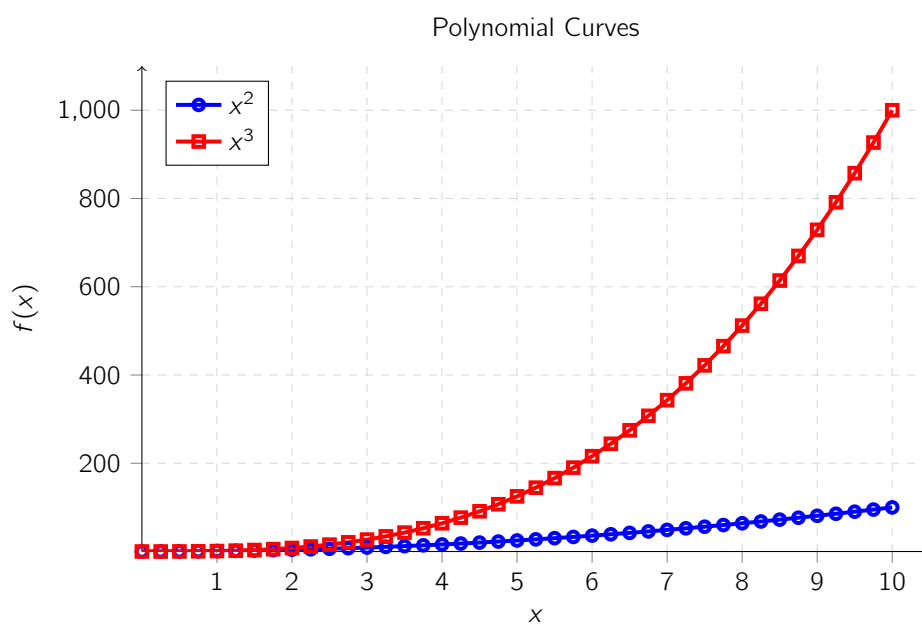
#### a. Compile and run the sample programs

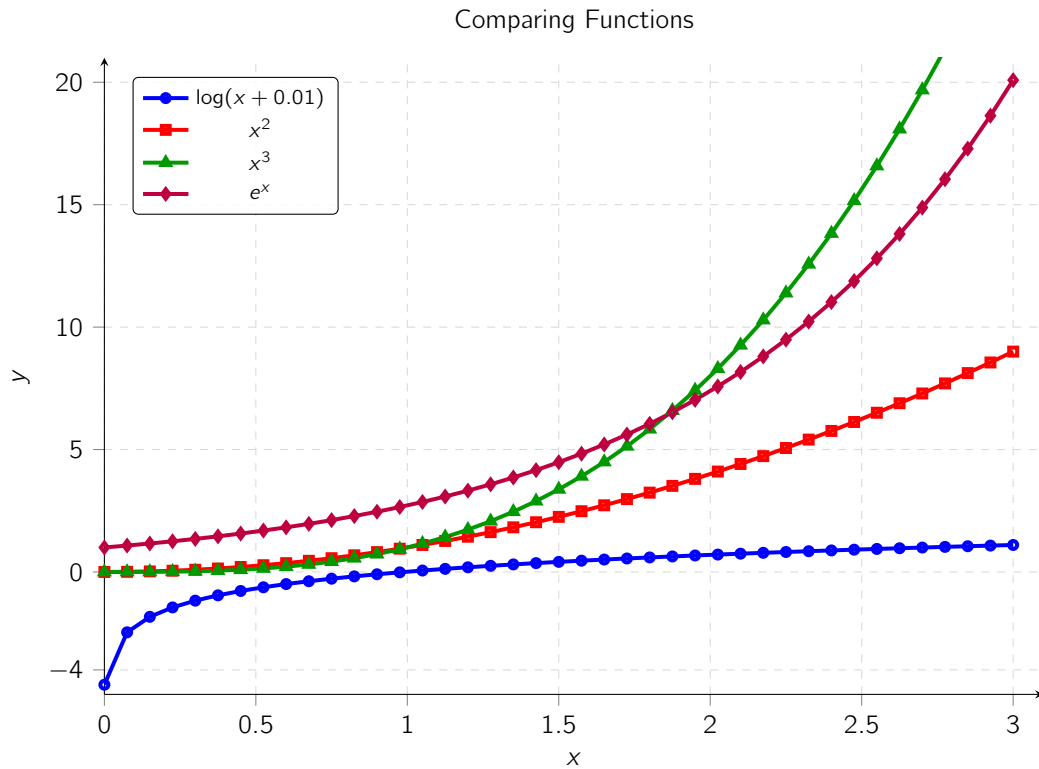
The sample programs `TestSingleCurve.cpp`, `TestTwoCurve.cpp` and `TestMultipleCurve.cpp` were run. They compiled without errors, and the following results were obtained:

##### TestSingleCurve.cpp



##### TestTwoCurve.cpp





**b. Compute Option Price for a monotonically increasing Spot ( $S$ )**

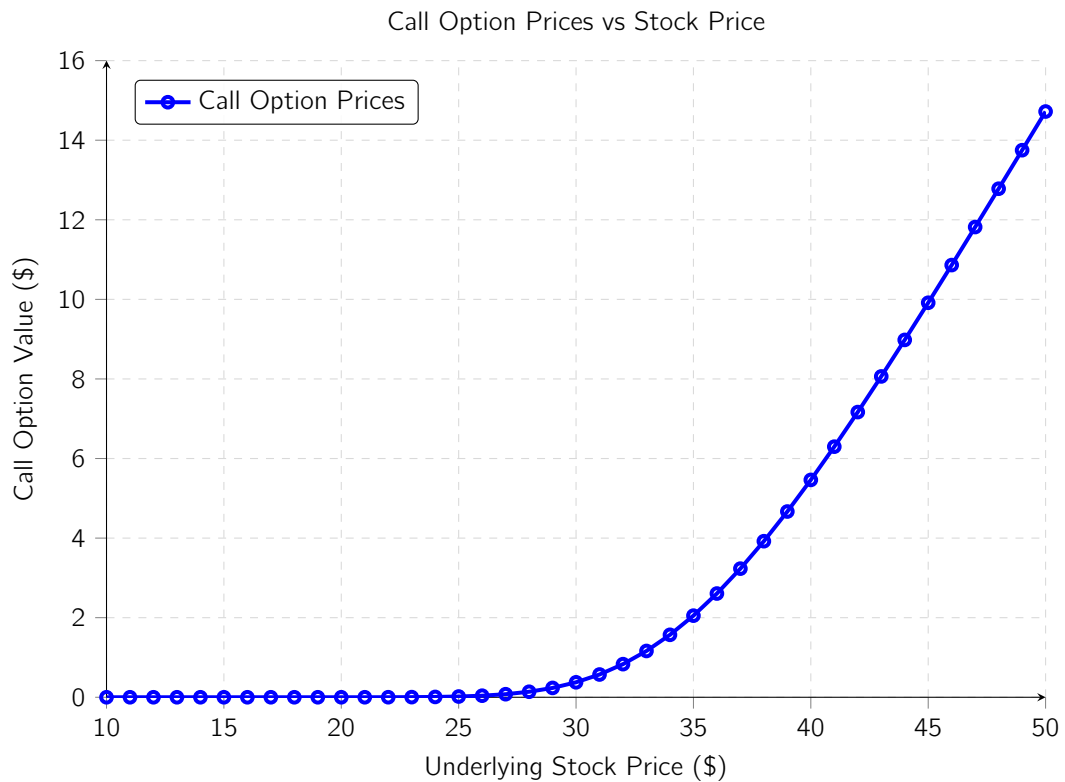


Figure 1: Call option pricing curve showing characteristic exponential growth for out-of-the-money options transitioning to linear growth for in-the-money options

The previously implemented MeshGenerator class (as part of section A&B) was used to generate a mesh array of doubles separated by a mesh size  $h$ .

```
// Generate uniform price mesh for underlying asset values  
MeshGenerator<double> priceMesh(minAssetPrice, maxAssetPrice, priceIncrement);
```