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PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> g++ .\3-1.cpp -o 3-1
PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> ./3-1
Degree: 1,  $\cos(0.75) = 0.766100$ 
Error Bound: 0.0334197092
```

```
Degree: 2,  $\cos(0.75) = 0.732077$ 
Error Bound: 0.0002957432
```

```
Degree: 3,  $\cos(0.75) = 0.731716$ 
Error Bound: 0.0000018423
```

```
Degree: 4,  $\cos(0.75) = 0.731704$ 
Error Bound: 0.0000000253
```

```
PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> g++ .\3-2.cpp -o 3-2
PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> ./3-2
Inverse Interpolation using Secant
Secant Method (Initial guesses 0, 1):
Converged to root: 0.567145 in 5 iterations
```

```
PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> g++ .\3-3.cpp -o 3-3
PS C:\Users\yunyu\Documents\大學\三下\數值方法\Numerical_class\HW3> ./3-3
The position at t = 10: 596.316 feet
The velocity at t = 10: -100.718 feet/sec
Speed exceeds 55 mi/h at t = 0.03246 seconds
Speed at that moment: 80.6707 ft/s
The predicted maximum speed is: 398.204 ft/s at t = 12.4111 seconds
```