AME 20214
Homework 11
Due: Thursday, 29 November 2012, in class

1. Repeat problem 1 from Homework 3 using `Fortran 77`.

2. Following the procedure outlined in Chapter 26 of the course notes, write a `Fortran 90` function subroutine to evaluate the Taylor series expansion of $\sinh x$ about $x = 0$ with seven non-zero terms. Process this subroutine with the `f2py Fortran` to `Python` software, and demonstrate its execution within the `Python` environment much as done in Chapter 26. Include a copy of your subroutine as well as a listing of the `Python` operations to approximate $\sinh(3)$.

Prepare your homework using the LaTeX text processor, include at least one equation, make beautiful plots, and adhere to a *three page maximum*.