scat_one is a two-body scattering solver in a general Woods
Saxon potential (real, imaginary, spin-orbit) for a given
l, s, j quantum number set - but for a single c.m. energy.
Input can be provided at the program prompts else put in a
file and read using standard redirect scat_one < filename

Output is the phase shift to the file xxx where xxx
is read from the input and the wavefunction (for plotting)
to file specified in input at yyy


```
----------------------------
xxx
yyy
4.0  2.0
2.0  1.0
78.5 1.1969  0.65
0.   1.       1.
0.   1.       1.
2.05 1.1969  0.65
2    0.881
1    3

%----------------------------
phase-shift output file
wave function output file
mass    core    valence
charge core    valence
potential strength vr  rr   ar
potential strength wv  rv   av
potential strength ws  rs   as
potential strength vso rso  aso
lval:    energy
s-value  j-value
%----------------------------
```