```
@@
@@
@@ Thermodynamic properties
@@
set-log ex02,,


go d
sw ssol2
@@ Pure Fe is selected as unary system
d-sys fe
get
go p-3
@@ In POLY-3 we first define a single equilibrium
s-c t=300,p=1e5,n=1
c-e
l-e,,,,

@?<Hit_return_to_continue>
@@ We set T as axis variable
s-a-v
1
t
300
2000
42.5
@@ We always save in order to be able to come back to this point
save tcex02a y
@@ Step along the axis
step
NORMAL
@@ Post processing is the essential part of this example
@@ We will plot Gm, Hm and Cp for some phases
post
@#1Plotformat

s-p-f ##1,,,,,


@@ The  x-axis will be the temperature in Kelvin
s-d-a x
?
t-k
@@ The phases for which Gm shall be plotted must be defined
@@ in a table
ent tab
g1
gm(bcc) gm(fcc) gm(liq) gm(hcp)


@@ The table is set as y-axis and all columns included
s-d-a y g1
*
```

```
set-title example 2a
pl

@?<Hit_return_to_continue>
@@
@@ The magnitude makes it difficult to see anything. Enter
@@ functions for the differences with respect to bcc
ent fun dgf=gm(fcc)-gm(bcc);
ent fun dgl=gm(liq)-gm(bcc);
ent fun dgh=gm(hcp)-gm(bcc);
@@ and enter a new table and set it as y-axis
ent tab g2
dgf dgl dgh;
s-d-a y g2
*
set-title example 2b
plot

@?<Hit_return_to_continue>
@@ In order to have some identification on the lines
@@ use the command SET_LABEL
s-lab
D
set-title example 2c
pl

@?<Hit_return_to_continue>
@@ Now plot enthalpies
ent tab h1
hm(bcc) hm(fcc) hm(liq) hm(hcp);
s-d-a y h1
*
set-title example 2d
pl

@?<Hit_return_to_continue>
@@ And finally plot heat capacities
ent fun cpb=hm(bcc).t;
ent fun cpf=hm(fcc).t;
ent fun cpl=hm(liq).t;
ent fun cph=hm(hcp).t;
ent tab cp1
t cpb cpf cpl cph;
s-d-a y
cp1
2-5
s-d-a x cp1 1
set-title example 2e
pl
set-inter
```