

```
NameError: name 'hc' is not defined
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(298,"CO"))'
29.180826669760002
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(550,"CO"))'
30.122935000000005
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(550,"H2"))'
29.335111875000006
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(298,"H2"))'
28.87958292084
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(298,"CH4"))'
35.54815601855999
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(550,"CH4"))'
49.659060000000004
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(298,"N2"))'
29.176992445439996
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(550,"N2"))'
29.850240000000003
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(298,"CH3OH"))'
43.82677783616
dhcp-10-22-25-251:oving1 vegardjervell$ python -c 'from HeatCp import HeatCapacity as hc; print( hc(550,"CH3OH"))'
63.236659999999999
dhcp-10-22-25-251:oving1 vegardjervell$ python
Python 3.5.2 |Anaconda 4.2.0 (x86_64)| (default, Jul  2 2016, 17:52:12)
[GCC 4.2.1 Compatible Apple LLVM 4.2 (clang-425.0.28)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> from HeatCp import MeanHeatCapacity as mhcp
```

```
>>> file = open('cp_data.txt','r')
>>> coefflist = [line.split()[0][6:] for line in file.readlines()]
>>> coefflist
['CO', 'H2', 'CH4', 'N2', 'CH3OH']
```

```
>>> for i in range(len(partlist)):
...     cp+=partlist[i]*mhcp(298,500,coefflist[i])
...
>>> cp
31.015707364864504
>>> partlist = [0.21,0.53,0.16,0.05,0.05]
```

```
>>> cp=0
>>> for i in range(len(partlist)):
...     cp+=partlist[i]*mhcp(298,550,coefflist[i])
...
>>> cp
32.6228244892336
```