```
&CONTROL
calculation     = 'scf'
pseudo_dir      = '../pseudo/'
outdir          = '../tmp/'
prefix          = 'gr'
/
&SYSTEM
ibrav           = 4
a               = 2.4639055825
c               = 15.0
nat             = 2
ntyp            = 1
occupations     = 'smearing'
smearing        = 'mv'
degauss         = 0.02
ecutwfc         = 80
assume_isolated = '2D'
/
&ELECTRONS
mixing_beta     = 0.7
conv_thr        = 1.0D-6
/
ATOMIC_SPECIES
C 12.0107 C.pbe-n-rrkjus_psl.0.1.UPF
ATOMIC_POSITIONS (crystal)
C   0.333333333   0.666666666   0.500000000
C   0.666666666   0.333333333   0.500000000
K_POINTS (automatic)
12 12 1 0 0 0
```

```
phonon calc.
&INPUTPH
outdir = '../tmp/'
prefix = 'gr'
tr2_ph = 1d-14
ldisp  = .true.
nq1     = 6
nq2     = 6
nq3     = 1
fildyn = 'gr.dyn'
/
```