在 data demo 中创建两个文件

输入命令 nano Matrix\_multip.f90 和 nano Main.f90

```
-rw-r--r-- 1 ese-zenghx ese-ouycc 4090 Dec 3 10.43 Cthk
-rw-r--r-- 1 ese-zenghx ese-ouycc 665 Dec 31 17:58 Main.f90
-rw-r--r-- 1 ese-zenghx ese-ouycc 125 Dec 31 17:57 Matrix_multip.f90
```

用 subroutine 编写子程序,

```
subroutine Matrix multip(a,b,c,n)
```

在 Main 中使用 open () 读取文件

```
open(unit=u, file='/work/ese-ouycc/fortran_2/M.dat', status='old')
open(unit=v, file='/work/ese-ouycc/fortran_2/N.dat', status='old')
```

读取结束后用 close()关闭

```
close(u)
close(v)
```

用 write ()输出

```
do i=1,n
write(u,'(f8.1,f8.1,f8.1)') c(i,j),c(i,j+1),c(i,j+2)
enddo
```

## 编译两个文件, 运行得到结果

```
[ese-zenghx@login03 data_demo]$ gfortran Matrix_multip.f90 Main.f90 -o Matrix_multip.x
[ese-zenghx@login03 data_demo]$ ./Matrix_multip.x
the answer is:
                           166.544601
                                               540.466431
                                                                    256.628113
the answer is:
                          146.990845
 line
                                               431.394775
                                                                    208.193146
 the answer is:
 line
                           116.358841
                                               510.897797
                                                                    198.899948
                   3:
```