



For *debug* and *testing* purposes it is possible to read and write matrices/vectors to file

Harwell-Boeing the same file can (optionally) contains also the rhs

```
call hb_read(a, iret, iunit, filename, rhs, mtitle),  
call hb_write(a, iret, iunit, filename, key , rhs , mtitle)
```

Matrix Market different functions for matrices and vectors

```
call mm_mat_read(a, iret, iunit, filename)  
call mm_array_read(rhs, iret, iunit, filename)  
call mm_mat_write(a, mtitle, iret, iunit, filename)  
call mm_array_write(rhs, iret, iunit, filename)
```

where `iret` is always an integer error code, and `iunit` the Fortran file unit number.