

```

program test_binary
  implicit none
  integer :: i
  integer :: len_rec
  real(4) :: a(3)
  real(8) :: b(3)
  !!-----

  do i=1,3
    a(i) = real(i,4)
    b(i) = dble(i)
  enddo

  !!*****
  *****
  !! integer & single precision real

  !! unformatted, sequential
  open(30, file='unformatted_sequential.dat', action="write",
status="replace" &
    & , position="rewind" &
    & , form="unformatted", access="sequential" )
  write(30) ( i , i=1,3)
  write(30) (a(i), i=1,3)
  close(30)

  !! unformatted, direct, len_rec=1*4 ならこう書ける
  len_rec = 1*4
  open(30, file='unformatted_direct_1x4.dat', action="write",
status="replace" &
    ! & , position="rewind" & !! ← direct のときは position を使えない
    & , form="unformatted", access="direct", recl=len_rec ) !! direct
  なので recl が必要
  !! direct なので rec が必要
  do i=1,3
    write(30, rec=i) i
    write(30, rec=i+3) a(i)
  enddo
  close(30)

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!! unformatted, direct, len_rec=3*4 ならこう書ける
len_rec = 3*4 !! integer or single precision real を3つでワンセット
open(30, file='unformatted_direct_3x4.dat', action="write",
status="replace" &
! & , position="rewind" & !! ← direct のときは position を使えない
& , form="unformatted", access="direct", recl=len_rec ) !! direct
なので recl が必要
!! direct なので rec が必要
write(30, rec=1) ( i , i=1,3)
write(30, rec=2) (a(i), i=1,3)
close(30)

```

```

!! unformatted, stream
open(30, file='unformatted_stream.dat', action="write",
status="replace" &
& , position="rewind" &
& , form="unformatted", access="stream" )
write(30) ( i , i=1,3)
write(30) (a(i), i=1,3)
close(30)

```

```

!! binary (ifort only)
!! ifort 以外 (g95, gfortran) ではコンパイルエラーになるのでコメントアウト
する必要がある
open(30, file='binary.dat', action="write", status="replace" &
& , position="rewind" &
& , form="binary" )
write(30) ( i , i=1,3)
write(30) (a(i), i=1,3)
close(30)

```

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!!*****
*****

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!! double precision real

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!! unformatted, sequential

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open(30, file='unformatted_sequential_dp.dat', action="write",
status="replace" &
& , position="rewind" &
& , form="unformatted", access="sequential" )
write(30) ( i , i=1,3)
write(30) (b(i), i=1,3)
close(30)

```

```

!! unformatted, direct, len_rec=1*8 ならこう書ける
len_rec = 1*8
open(30, file='unformatted_direct_1x8_dp.dat', action="write",
status="replace" &
! & , position="rewind" & !! ← direct のときは position を使えない
& , form="unformatted", access="direct", recl=len_rec ) !! direct
なので recl が必要
!! direct なので rec が必要
do i=1,3
write(30, rec=i) i
write(30, rec=i+3) b(i)
enddo
close(30)

```

```

!! unformatted, direct, len_rec=3*8 ならこう書ける
len_rec = 3*8 !! integer or single precision real を3つでワンセット
open(30, file='unformatted_direct_3x8_dp.dat', action="write",
status="replace" &
! & , position="rewind" & !! ← direct のときは position を使えない
& , form="unformatted", access="direct", recl=len_rec ) !! direct
なので recl が必要
!! direct なので rec が必要
write(30, rec=1) ( i , i=1,3)
write(30, rec=2) (b(i), i=1,3)
close(30)

```

```

!! unformatted, stream
open(30, file='unformatted_stream_dp.dat', action="write",
status="replace" &
& , position="rewind" &
& , form="unformatted", access="stream" )
write(30) ( i , i=1,3)
write(30) (b(i), i=1,3)

```

```
close(30)

!! binary (ifort only)
!! ifort 以外 (g95, gfortran) ではコンパイルエラーになるのでコメントアウト
    する必要がある
open(30, file='binary_dp.dat', action="write", status="replace" &
    & , position="rewind" &
    & , form="binary" )
write(30) ( i , i=1,3)
write(30) (b(i), i=1,3)
close(30)

stop
endprogram test_binary
```