Third Quiz

The program `sequence` reads 1000 numbers between 0 and 1 from a file called `inp.dat`. This sequence of numbers may contain sub-sequences in which all the numbers are larger than 0.5. Having read the numbers, the program should find the length of the longest such sub-sequence and write this length on the screen. As in the second quiz, several lines have been removed from the progam. They are, in random order,

(a) `read(3,*)x(i)`
(b) `enddo`
(c) `open(3,file='inp.dat')`
(d) `endif`
(e) `if(length > maxlength)then`
(f) `write(*,*)maxlength`
(g) `maxlength=length`
(h) `do i=1,1000`
(i) `integer::  i, maxlength, length`
(j) `maxlength=0`
(k) `end program sequence`

You should associate each one to one of the missing statements. For example, Statement 11 is (k).

```
      program sequence
      implicit none
      double precision:: x(1000)
! Missing statement 1
! Missing statement 2
! Missing statement 3
! Missing statement 4
      enddo
! Missing statement 5
      length=0
      do i=1,1000
      if(x(i) > 0.5d0)then
      length = length + 1
      else
      length=0
      endif
! Missing statement 6
! Missing statement 7
! Missing statement 8
! Missing statement 9
! Missing statement 10
! Missing statement 11
```