```
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!Assinment-2: Q1 -Generating Random Walk
program randomwalk
  implicit none
  integer::i,n,dest,j
  n=1000
  open(1,file="Q1-1.txt",status="unknown")
                                               !Q1 result file 1
  open(2,file="Q1-2.txt",status="unknown")
                                               !Q1 result file 2
  open(3,file="Q1-3.txt",status="unknown")
                                               !Q1 result file 3
  open(4,file="Q1-4.txt",status="unknown")
                                               !Q1 result file 4
  do j=1,4
               !To get 4 random walk
    dest=0 !destination
    write(j,*)0,dest
    do i=1,n
       dest= dest+ (-1)**nint(rand()) !if random number>0.5 nint=1 else 0 so 1 is subtracted & added
rispectively
       write(j,*)i,dest
    enddo
  enddo
end program randomwalk
```

