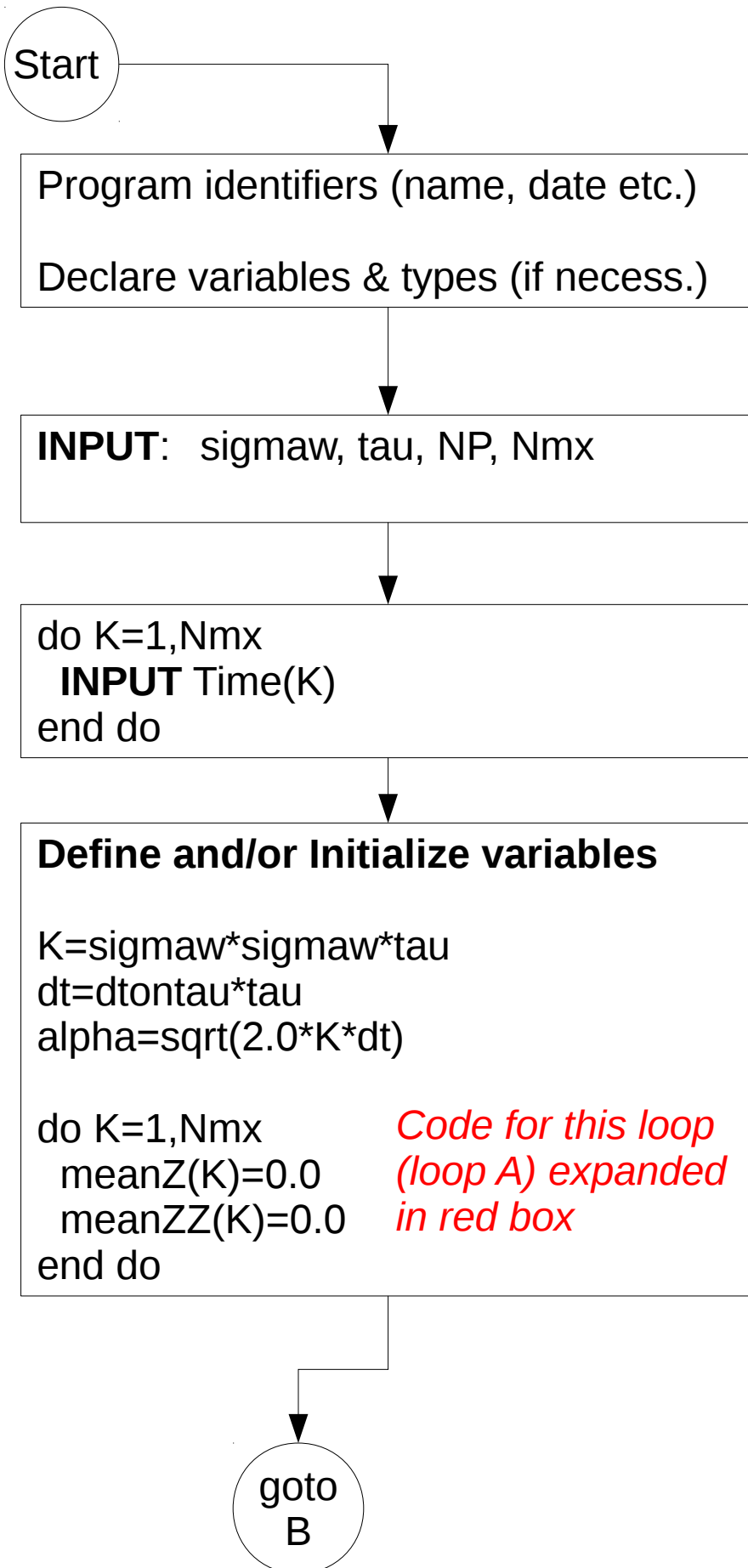
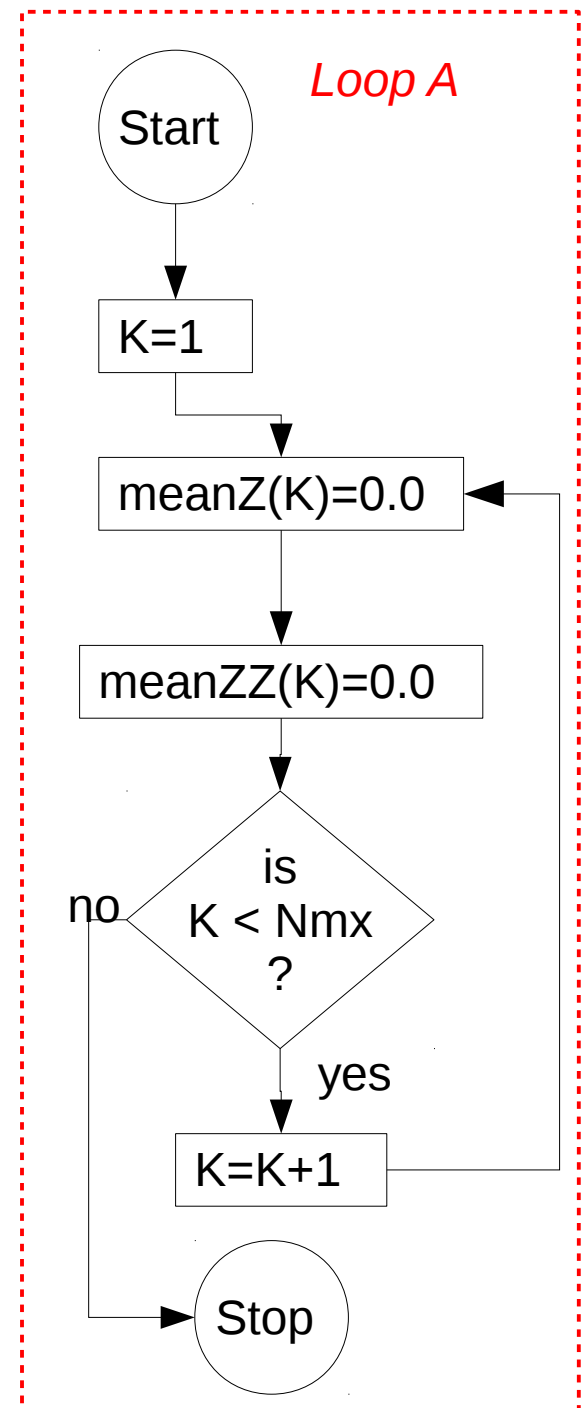




Note: you may choose to define values of controlling **INPUTS** within your program, or read them from a parameter file.



B

## Compute NP paths

```
do N=1,NP
  t=0
  Z=0
  t=0
  do while t <= Time(Nmx)
    tprev=t
    t=t+dt
    call STDNORMAL(r)
    dZ=alpha*r
    Z=Z+dZ
```

## Check whether arrived/passed an output time

```
do K=1,Nmx
  if(tprev<Time(K) & t>=Time(K) then
    meanZ(K)=meanZ(K)+Z
    meanZZ(K)=meanZZ(K)+Z*Z
  endif
end do
end do
end do
```

## Unscale and output

```
do K=1,Nmx
  meanZ(K)=meanZ(K)/NP
  meanZZ(K)=meanZZ(K)/NP-meanZ(K)*meanZ(K)
  sigmaZ=sqrt(meanZZ(K))
  OUTPUT K, Time(K), meanZ(K), sigmaZ, sigmaZ_theor
end do
```

*add code to  
compute the  
theoretical spread*

