```fortran
      SUBROUTINE G3_4(GB,G,M,NT,N,NS,XX,YY,ZZ,XN,YN,ZN,S,L,L1)
C===================================================================
      REAL GB(M,M),G(M,M)
      REAL XX(NT),YY(NT),ZZ(NT),XN(NT),YN(NT),ZN(NT),S(NT)
        REWIND L
        REWIND L1
      DO 100 II=1,N
       I=II
      DO 100 JJ=1,N
        J=JJ
      CALL G3G(GB,G,M,NT,XX,YY,ZZ,XN,YN,ZN,S,I,II,J,JJ)
100   CONTINUE
        write(*,*) '1'
        WRITE(L) ((GB(I,J),J=1,N),I=1,N)
        WRITE(L1) ((G(I,J),J=1,N),I=1,N)
      DO 101 II=1,N
        I=II
      DO 101 JJ=1,NS
        J=JJ+N
      CALL G3G(GB,G,M,NT,XX,YY,ZZ,XN,YN,ZN,S,I,II,J,JJ)
101   CONTINUE
        write(*,*) '2'
        WRITE(L) ((GB(I,J),J=1,NS),I=1,N)
        WRITE(L1) ((G(I,J),J=1,NS),I=1,N)
      DO 102 II=1,NS
        I=II+N
      DO 102 JJ=1,N
        J=JJ
      CALL G3G(GB,G,M,NT,XX,YY,ZZ,XN,YN,ZN,S,I,II,J,JJ)
102   CONTINUE
        write(*,*) '3'
        WRITE(L) ((GB(I,J),J=1,N),I=1,NS)
        WRITE(L1) ((G(I,J),J=1,N),I=1,NS)
      DO 103 II=1,NS
        I=II+N
      DO 103 JJ=1,NS
        J=JJ+N
```
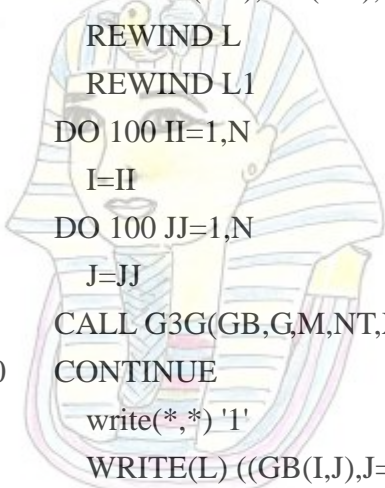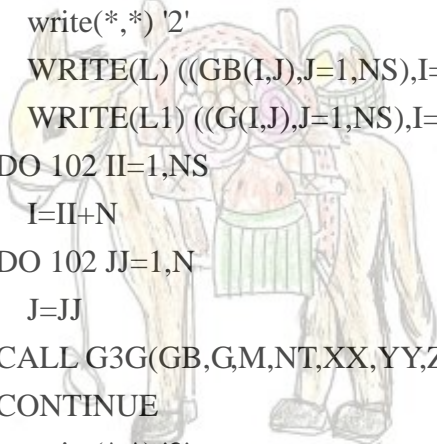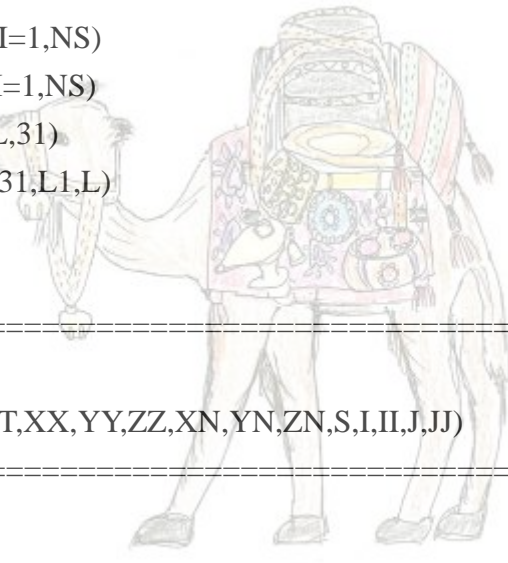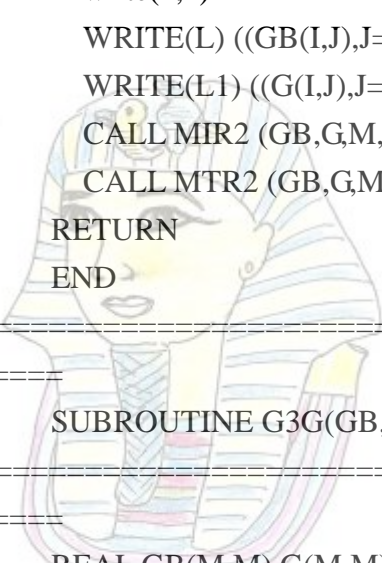
```fortran
        CALL G3G(GB,G,M,NT,XX,YY,ZZ,XN,YN,ZN,S,I,II,J,JJ)
103     CONTINUE
        write(*,*) '4'
        WRITE(L) ((GB(I,J),J=1,NS),I=1,NS)
        WRITE(L1) ((G(I,J),J=1,NS),I=1,NS)
        CALL MIR2 (GB,G,M,N,NS,L,31)
        CALL MTR2 (GB,G,M,N,NS,31,L1,L)
        RETURN
        END
C=====================================================================
        SUBROUTINE G3G(GB,G,M,NT,XX,YY,ZZ,XN,YN,ZN,S,I,II,J,JJ)
C=====================================================================
        REAL GB(M,M),G(M,M)
        REAL XX(NT),YY(NT),ZZ(NT),XN(NT),YN(NT),ZN(NT),S(NT)
        PAI=3.1415927
        IF(I.EQ.J)    GO TO 203
        R=SQRT((XX(I)-XX(J))**2+(YY(I)-YY(J))**2+(ZZ(I)-ZZ(J))**2)
        RN=((XX(J)-XX(I))*XN(J)+(YY(J)-YY(I))*YN(J)+(ZZ(J)-ZZ(I))*ZN(J))
     &/R*(-1)
        GB(II,JJ)=0.5/PAI/R**2*RN*S(J)
        G(II,JJ)=0.5/PAI/R*S(J)
        GO TO 103
203     GB(II,JJ)=1.0
        G(II,JJ)=SQRT(0.9945/PAI*S(J))
103     CONTINUE
        RETURN
        END
```