

C*****

SUBROUTINE CQ2(A,B,C,NX,N,NS,NN)

REAL A(NX,NX),B(NX,NX),C(NX,8)

CALL MIC2(A,B,NX,N,NS)

REWIND 31

REWIND 32

DO 200 IP=1,NN

REWIND 3

REWIND 4

READ(3) ((A(I,J),J=1,N),I=1,N)

READ(4) ((B(I,J),J=1,N),I=1,N)

READ(31) (C(I,1),I=1,N)

READ(31) (C(I,2),I=1,NS)

READ(31) (C(I,3),I=1,N)

READ(31) (C(I,4),I=1,NS)

DO 100 I=1,N

R=0.

S=0.

T=0.

U=0.

DO 101 J=1,N

R=R+A(I,J)*C(J,1)

S=S+B(I,J)*C(J,3)

T=T+A(I,J)*C(J,3)

U=U+B(I,J)*C(J,1)

101 CONTINUE

C(I,5)=R+S

C(I,7)=T-U

100 CONTINUE

READ(3) ((A(I,J),J=1,NS),I=1,N)

READ(4) ((B(I,J),J=1,NS),I=1,N)

DO 102 I=1,N

U=0. 載滿貨品的驢子

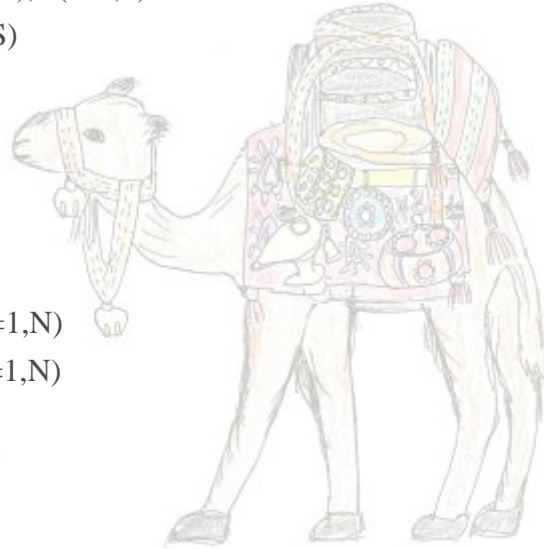
T=0.

S=0.

R=0.

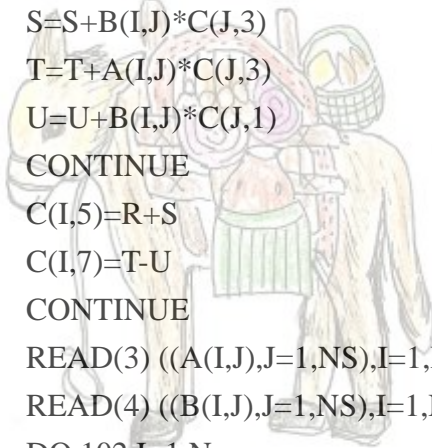
DO 103 J=1,NS

R=R+A(I,J)*C(J,2)



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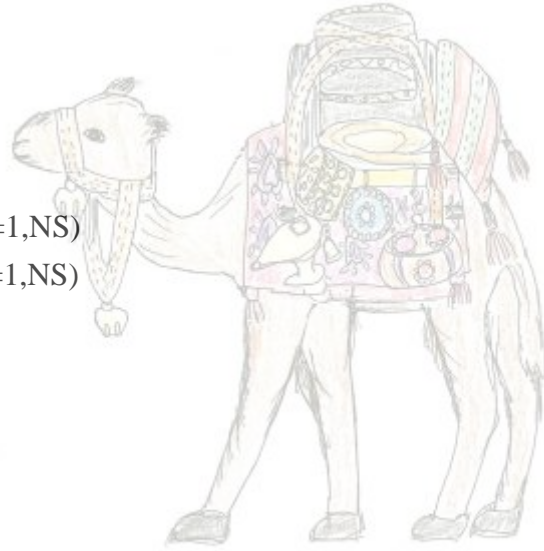
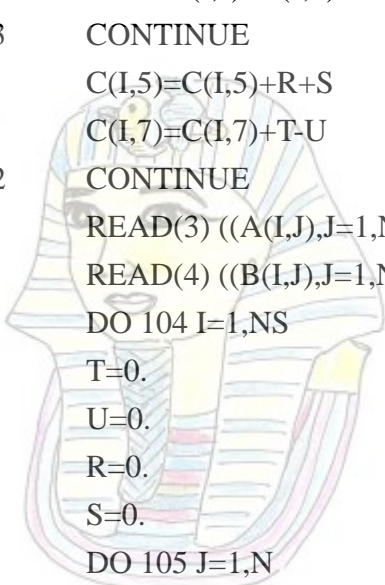


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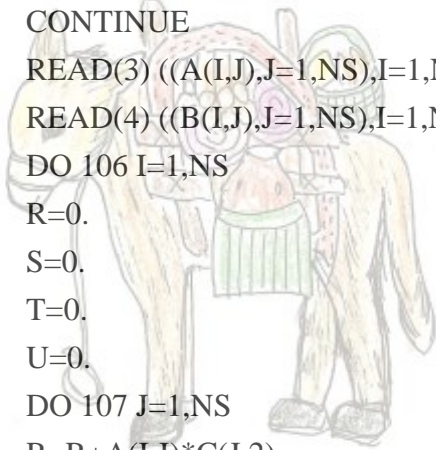
```

S=S+B(I,J)*C(J,4)
T=T+A(I,J)*C(J,4)
U=U+B(I,J)*C(J,2)
103 CONTINUE
C(I,5)=C(I,5)+R+S
C(I,7)=C(I,7)+T-U
102 CONTINUE
READ(3) ((A(I,J),J=1,N),I=1,NS)
READ(4) ((B(I,J),J=1,N),I=1,NS)
DO 104 I=1,NS
T=0.
U=0.
R=0.
S=0.
DO 105 J=1,N
R=R+A(I,J)*C(J,1)
S=S+B(I,J)*C(J,3)
T=T+A(I,J)*C(J,3)
U=U+B(I,J)*C(J,1) 2011 埃及尼羅河之旅
105 CONTINUE
C(I,6)=R+S
C(I,8)=T-U
104 CONTINUE
READ(3) ((A(I,J),J=1,NS),I=1,NS)
READ(4) ((B(I,J),J=1,NS),I=1,NS)
DO 106 I=1,NS
R=0.
S=0.
T=0.
U=0.
DO 107 J=1,NS
R=R+A(I,J)*C(J,2)
S=S+B(I,J)*C(J,4)
T=T+A(I,J)*C(J,4)
U=U+B(I,J)*C(J,2)
107 CONTINUE
C(I,6)=C(I,6)+R+S
C(I,8)=C(I,8)+T-U

```



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```

106 CONTINUE
WRITE(32) (C(I,5),I=1,N)
WRITE(32) (C(I,6),I=1,NS)
WRITE(32) (C(I,7),I=1,N)
WRITE(32) (C(I,8),I=1,NS)

```

```

200 CONTINUE
RETURN
END

```

C*****

```

SUBROUTINE MIC2(A,B,Nx,N,NS)
REAL A(NX,NX),B(NX,NX)
CALL MIR2(A,B,Nx,N,NS,1,3)
WRITE(*,*) 'MIR2'
CALL MTR2(A,B,Nx,N,NS,3,2,8)
WRITE(*,*) 'MTR2'

```

```

CALL MTR2(A,B,Nx,N,NS,2,8,3)
WRITE(*,*) 'MTR2'

```

```

CALL WAR2(A,B,Nx,N,NS,1,3,4)
WRITE(*,*) 'WAR2'

```

```

CALL MIR2(A,B,Nx,N,NS,4,3)
WRITE(*,*) 'MIR2'

```

```

CALL MTR2(A,B,Nx,N,NS,8,3,4)
WRITE(*,*) 'MTR2'

```

```

RETURN
END

```

C*****

```

SUBROUTINE WAR2(A,B,Nx,N,NS,L,M,K)
REAL A(NX,NX),B(NX,NX)
REWIND L
REWIND M
REWIND K

```

```

READ(L) ((A(I,J),J=1,N),I=1,N)

```

```

READ(M) ((B(I,J),J=1,N),I=1,N)

```

```

CALL WA(B,A,NX,N,N)

```

```

WRITE(K) ((A(I,J),J=1,N),I=1,N)

```

```

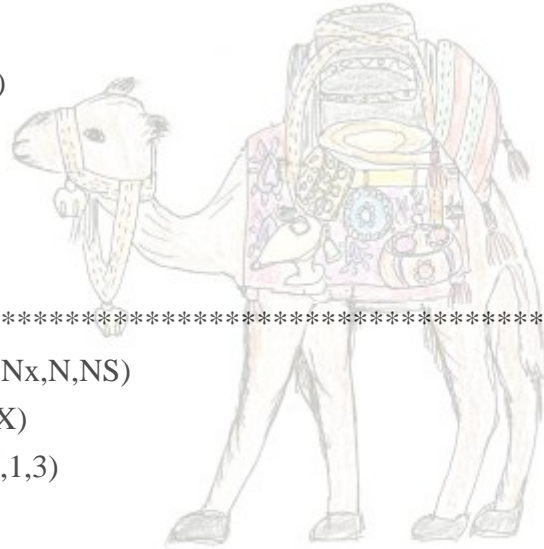
READ(L) ((A(I,J),J=1,NS),I=1,N)

```

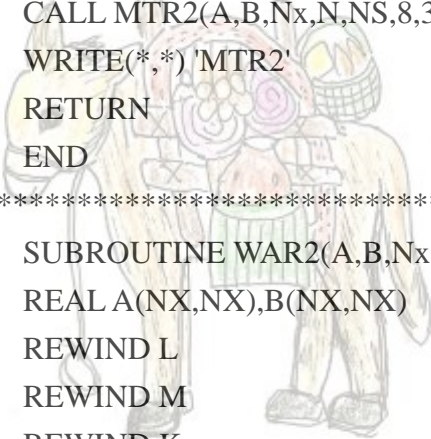
```

READ(M) ((B(I,J),J=1,NS),I=1,N)

```



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載滿珠寶的袋子



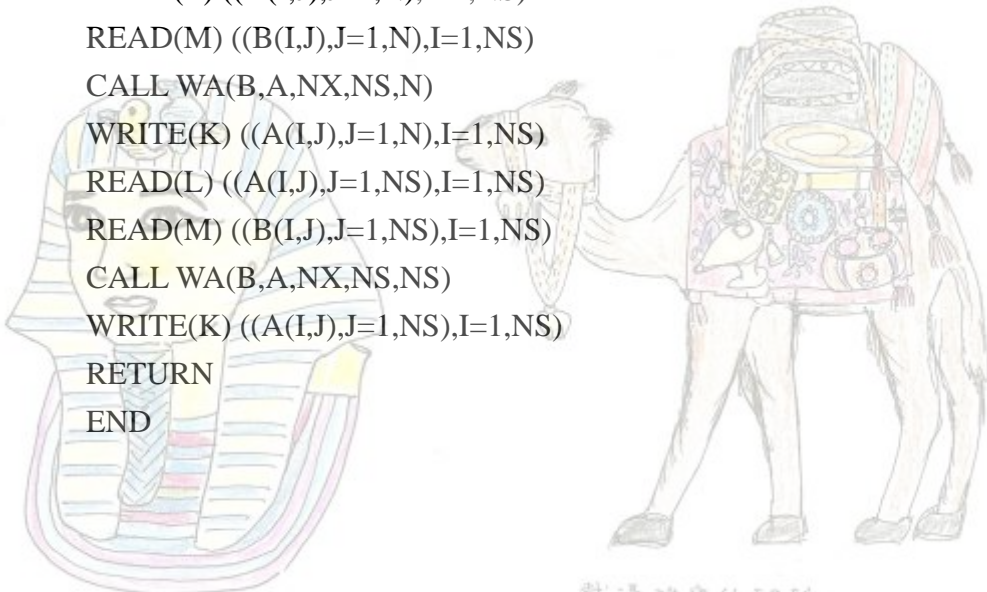
阿拉丁神燈

```

CALL WA(B,A,NX,N,NS)
WRITE(K) ((A(I,J),J=1,NS),I=1,N)
READ(L) ((A(I,J),J=1,N),I=1,NS)
READ(M) ((B(I,J),J=1,N),I=1,NS)
CALL WA(B,A,NX,NS,N)
WRITE(K) ((A(I,J),J=1,N),I=1,NS)
READ(L) ((A(I,J),J=1,NS),I=1,NS)
READ(M) ((B(I,J),J=1,NS),I=1,NS)
CALL WA(B,A,NX,NS,NS)
WRITE(K) ((A(I,J),J=1,NS),I=1,NS)
RETURN
END

```

C
C



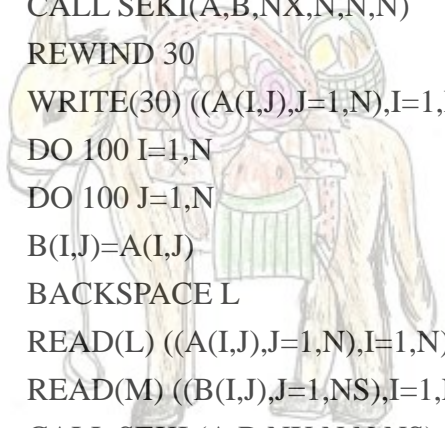
載滿物資的駱駝

```

SUBROUTINE MTR2 (A,B,Nx,N,NS,L,M,K)
REAL A(NX,NX),B(NX,NX)
write(*,*) 'begin mtr2'
REWIND L
REWIND M
READ(L) ((A(I,J),J=1,N),I=1,N)
READ(M) ((B(I,J),J=1,N),I=1,N)
CALL SEKI(A,B,NX,N,N,N)
REWIND 30
WRITE(30) ((A(I,J),J=1,N),I=1,N)
DO 100 I=1,N
DO 100 J=1,N
B(I,J)=A(I,J)
BACKSPACE L
READ(L) ((A(I,J),J=1,N),I=1,N)
READ(M) ((B(I,J),J=1,NS),I=1,N)
CALL SEKI (A,B,NX,N,N,NS)
WRITE(30) ((A(I,J),J=1,NS),I=1,N)
READ(L) ((A(I,J),J=1,NS),I=1,N)
READ(M) ((B(I,J),J=1,N),I=1,NS)
CALL SEKI (A,B,NX,N,NS,N)
REWIND 30
READ(30) ((B(I,J),J=1,N),I=1,N)

```

100

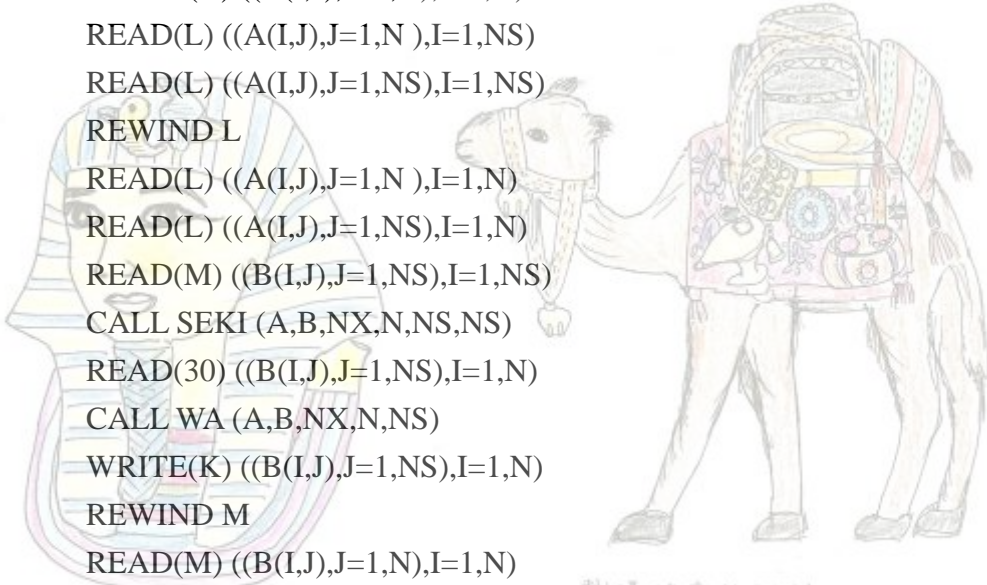


阿拉丁神燈

```

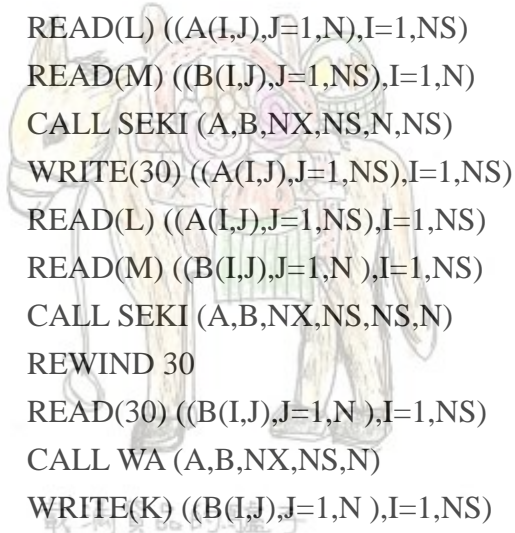
CALL WA (A,B,NX,N,N)
REWIND K
WRITE(K) ((B(I,J),J=1,N),I=1,N)
READ(L) ((A(I,J),J=1,N),I=1,NS)
READ(L) ((A(I,J),J=1,NS),I=1,NS)
REWIND L
READ(L) ((A(I,J),J=1,N),I=1,N)
READ(L) ((A(I,J),J=1,NS),I=1,N)
READ(M) ((B(I,J),J=1,NS),I=1,NS)
CALL SEKI (A,B,NX,N,NS,NS)
READ(30) ((B(I,J),J=1,NS),I=1,N)
CALL WA (A,B,NX,N,NS)
WRITE(K) ((B(I,J),J=1,NS),I=1,N)
REWIND M
READ(M) ((B(I,J),J=1,N),I=1,N)
READ(L) ((A(I,J),J=1,N),I=1,NS)
CALL SEKI (A,B,NX,NS,N,N)
REWIND 30
WRITE(30) ((A(I,J),J=1,N),I=1,NS)
READ(L) ((B(I,J),J=1,NS),I=1,NS)
BACKSPACE L
BACKSPACE L
READ(L) ((A(I,J),J=1,N),I=1,NS)
READ(M) ((B(I,J),J=1,NS),I=1,N)
CALL SEKI (A,B,NX,NS,N,NS)
WRITE(30) ((A(I,J),J=1,NS),I=1,NS)
READ(L) ((A(I,J),J=1,NS),I=1,NS)
READ(M) ((B(I,J),J=1,N),I=1,NS)
CALL SEKI (A,B,NX,NS,NS,N)
REWIND 30
READ(30) ((B(I,J),J=1,N),I=1,NS)
CALL WA (A,B,NX,NS,N)
WRITE(K) ((B(I,J),J=1,N),I=1,NS)
BACKSPACE L
READ(L) ((A(I,J),J=1,NS),I=1,NS)
READ(M) ((B(I,J),J=1,NS),I=1,NS)
CALL SEKI (A,B,NX,NS,NS,NS)
READ(30) ((B(I,J),J=1,NS),I=1,NS)

```



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```

CALL WA (B,A,NX,NS,NS)
WRITE(K) ((A(I,J),J=1,NS),I=1,NS)
write(*,*) 'end of mtr2'
RETURN
END

```

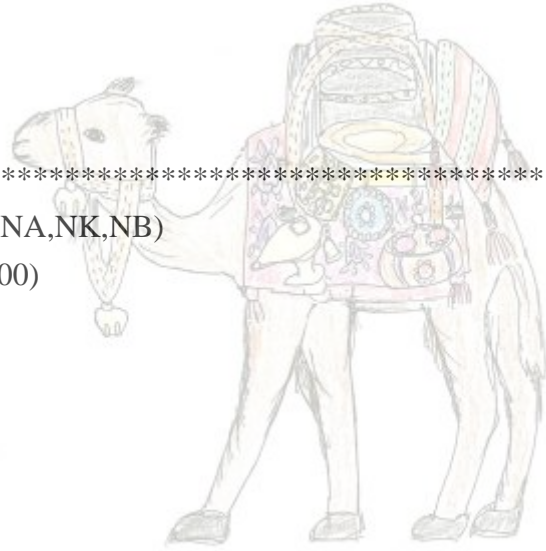
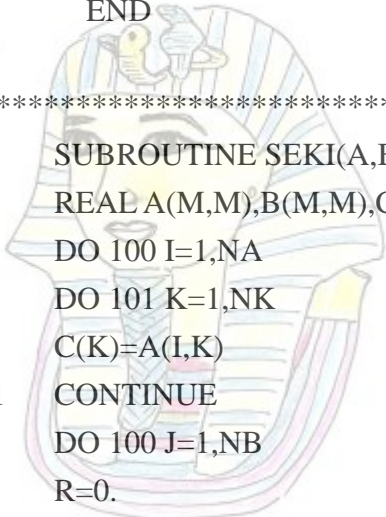
C

C*****

```

SUBROUTINE SEKI(A,B,M,NA,NK,NB)
REAL A(M,M),B(M,M),C(3000)
DO 100 I=1,NA
DO 101 K=1,NK
C(K)=A(I,K)
101 CONTINUE
DO 100 J=1,NB
R=0.
DO 102 K=1,NK
R=R+C(K)*B(K,J)
102 CONTINUE
A(I,J)=R
100 CONTINUE
write(*,*) 'seki'
RETURN
END

```



載滿珠寶的駱駝

2011 埃及尼羅河之旅

C*****

```

SUBROUTINE MINVS(A,KO,N,EPS,ILL)

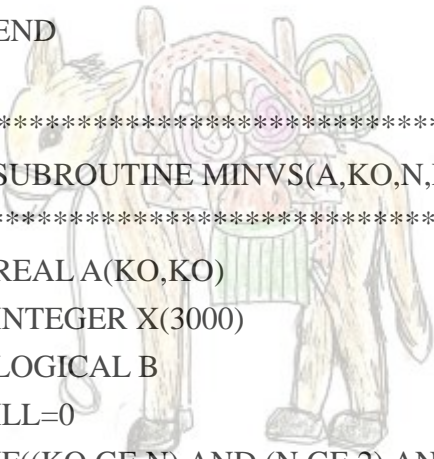
```

C*****

```

REAL A(KO,KO)
INTEGER X(3000)
LOGICAL B
ILL=0
IF((KO.GE.N).AND.(N.GE.2).AND.(N.LE.3000).AND.(EPS.GT.0.0))
/ GO TO 1
ILL=30000
RETURN
1 DO 10 I=1,N
X(I)=I
10 CONTINUE

```



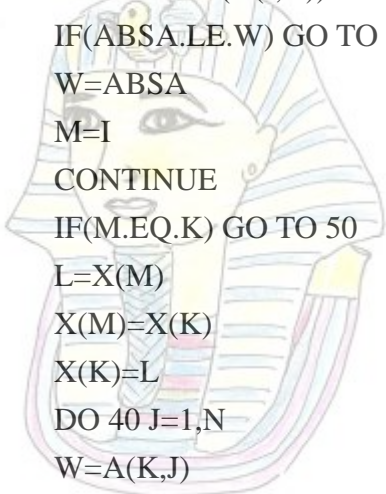
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載滿貨品的驢子

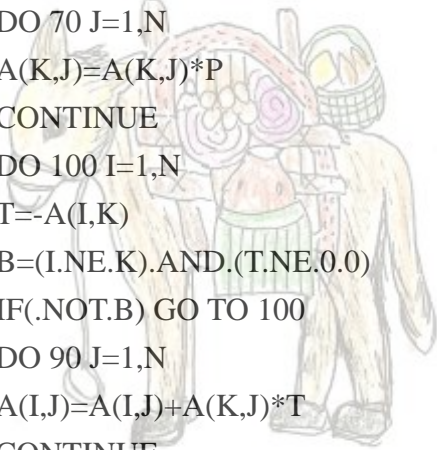
```

DO 110 K=1,N
M=K
W=0.0
DO 20 I=K,N
ABSA=ABS(A(I,K))
IF(ABSA.LE.W) GO TO 20
W=ABSA
M=I
20 CONTINUE
IF(M.EQ.K) GO TO 50
L=X(M)
X(M)=X(K)
X(K)=L
DO 40 J=1,N
W=A(K,J)
A(K,J)=A(M,J)
A(M,J)=W
40 CONTINUE
50 IF(ABS(A(K,K)).GE.EPS) GO TO 60
ILL=K
RETURN
60 P=1.0/A(K,K)
DO 70 J=1,N
A(K,J)=A(K,J)*P
70 CONTINUE
DO 100 I=1,N
T=-A(I,K)
B=(I.NE.K).AND.(T.NE.0.0)
IF(.NOT.B) GO TO 100
DO 90 J=1,N
A(I,J)=A(I,J)+A(K,J)*T
90 CONTINUE
100 A(I,K)=P*T
A(K,K)=P
110 CONTINUE
DO 140 I=1,N
120 IF(X(I).EQ.I) GO TO 140
K=X(I)

```



載滿珠寶的駱駝



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載有寶物的驢子

尼羅河之旅

```

DO 130 J=1,N
W=A(J,I)
A(J,I)=A(J,K)
A(J,K)=W
130 CONTINUE
L=X(I)
X(I)=X(K)
X(K)=L
GO TO 120
140 CONTINUE
write(*,*) 'minvs'
RETURN
END

```

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C

SUBROUTINE WA(A,B,NA,N,NS)



載滿珠寶的駱駝

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C [A]n,ns + [B]n,ns =====> [B]n,ns 羅河之旅

C*****

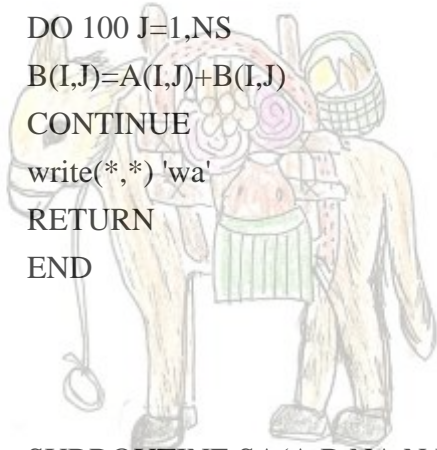
```

REAL A(NA,NA),B(NA,NA)
DO 100 I=1,N
DO 100 J=1,NS
B(I,J)=A(I,J)+B(I,J)
100 CONTINUE
write(*,*) 'wa'
RETURN
END

```

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SUBROUTINE SA(A,B,NA,N,NS)



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C*****

載滿寶物的馱子

C

C [A]n,ns - [B]n,ns =====> [B]n,ns

C*****

```

REAL A(NA,NA),B(NA,NA)
DO 100 I=1,N

```



```
DO 100 J=1,NS
B(I,J)=A(I,J)-B(I,J)
100 CONTINUE
write(*,*) 'sa'
RETURN
END
```

C



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