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Subject: Re: I don't know why happened error  
Posted by [Richard G. French](#) on Wed, 07 Jul 1999 07:00:00 GMT  
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Duck-Jin Park wrote:

>  
> Hi All!  
>  
> I don't know why happened error on IDL4.0..  
> follow function did not happened error on IDL5.1, but it exist error  
> IDL4.0  
> what different two version?  
> Can you change follow source to IDL4.0?  
>  
> If i change array "[ ]" to "( )", it did not error..  
>  
>

That's correct: the [ ] syntax for elements of array variables did not exist in IDL4.0. It was introduced in IDL5.0 I believe.  
Dick French

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Subject: I don't know why happened error  
Posted by [Duck-Jin Park](#) on Thu, 08 Jul 1999 07:00:00 GMT  
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Hi All!

I don't know why happened error on IDL4.0..  
follow function did not happened error on IDL5.1, but it exist error  
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what different two version?  
Can you change follow source to IDL4.0?

If i change array "[ ]" to "( )", it did not error..

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```
FUNCTION HR_LABEL_REGION,A
;Find the size of the array A. To do this we use the SIZE function.
S=SIZE(A) & N=S[1] & M=S[2] ; The number of columns and rows in A
Q=INTARR(N,M) ; Q will hold the results. It has the same size as A.
L=0 ; L is the value of the current class. Start with L=0.
EQU=INTARR(M*N*M) ; EQU is a place to record the class equivalencies in
pass 1.
th=16
;Label the corner pixel.
IF A[0,0] GT 0 THEN BEGIN
  L=L+1 & Q[0,0]=L
```

```

    EQU[L]=L
ENDIF

;Label the pixels in the first row.
FOR x=1,N-1 DO BEGIN
    IF A[x,0] GT 0 THEN BEGIN
        IF (A[x,0] GE (A[x-1,0]-th))AND (A[X,0] LE (A[X-1,0]+th)) THEN
            Q[x,0]=Q[x-1,0] ELSE BEGIN
                L=L+1
                Q[x,0]=L
                EQU[L]=L
            ENDELSE
        ENDIF
    ENDFOR

; Label the remaining rows
FOR y=1,M-1 DO BEGIN
    ; Label the first pixel in the row
    IF (A[0,y] GE (A[0,y-1]-th)) AND (A[0,Y] LE (A[0,Y-1]+th)) THEN
        Q[0,y]=Q[0,y-1]
        IF (A[0,y] GT 0) AND (A[0,y] LT (A[0,y-1]-th)) OR (A[0,Y] GT
(A[0,Y-1]+th)) THEN BEGIN
            L=L+1
            Q[0,y]=L
            EQU[L]=L
        ENDIF
        FOR x=1,N-1 DO BEGIN
            ; Label the rest of the elements in row y
            IF A[x,y] GT 0 THEN BEGIN
                IF (A[x,y] GE (A[x-1,y]-th)) AND (A[x,y] LE (A[x-1,y]+th)) AND
(A[x,y] LT (A[x,y-1]-th)) OR $
(A[x,y] GT (A[x,y-1]+th)) THEN Q[x,y]=Q[x-1,y]
                IF (A[x,y] LT (A[x-1,y]-th)) OR (A[x,y] GT (A[x-1,y]+th)) AND
(A[x,y] GE (A[x,y-1]-th)) AND $
(A[x,y] LE (A[x,y-1]+th)) THEN Q[x,y]=Q[x,y-1]
                IF (A[x,y] GE (A[x-1,y]-th)) AND (A[x,y] LE (A[x-1,y]+th)) AND
(A[x,y] GE (A[x,y-1]-th)) AND $
(A[x,y] LE (A[x,y-1]+th)) THEN BEGIN
                    IF ((Q[x-1,y]) GE (Q[x,y-1]-th)) AND ((Q[x-1,y]) LE
(Q[x,y-1]+th)) OR ((Q[x-1,y]-TH) LE (Q[x,y-1])) AND $
((Q[x-1,y]+TH) GE (Q[x,y-1]))THEN Q[x,y]=Q[x-1,y] ELSE BEGIN
                        ; An equivalence of classes has been discovered.
                        L1=Q[x-1,y]<Q[x,y-1] ; Find the smaller class label
                        L2=Q[x-1,y]>Q[x,y-1] ; Find the larger class label
                        Q[x,y]=L1 ; Set the current pixel class to the smaller
                        EQU[L2]=L1 ; Note the equivalency in the array
                    ENDELSE
                ENDIF
            ENDIF
        ENDFOR
    ENDIF

```

```

    IF (A[x,y] LT (A[x-1,y]-th)) OR (A[x,y] GT (A[x-1,y]+th)) AND $
(A[x,y] LT (A[x,y-1]-th)) OR (A[x,y] GT (A[x,y-1]+th)) THEN BEGIN
    L=L+1 ;New class is needed
    Q[x,y]=L
    EQU[L]=L
  ENDIF
ENDIF

```

```

ENDFOR
ENDFOR

```

; This completes the first pass through the image. We now have to  
 resolve  
 ; the class equivalencies.

EQU=EQU(0:L) ; Shorten the vector to the classes actually created.

```

FOR m=L,2,-1 DO BEGIN
  n=m
  WHILE (EQU[n] LT n) DO n=EQU[n]
  EQU[m]=n
ENDFOR

```

```

FOR m=2,L DO BEGIN
  D=WHERE(Q EQ m)
  Q(D)=EQU[m]
ENDFOR

```

```

RETURN,Q
END

```

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