Subject: Why Index array containing same index multiple time results only one arithmetic operation
Posted by AKJ on Wed, 09 Jun 2010 04:52:30 GMT
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Hi,
I am trying to compute texture of an image with following code

```
img=[[0,0,1,1],[0,0,1,1],[0,2,2,2],[2,2,3,3L]]
texture_map=LONARR(4,4)
dim=size(img, /DIMENSION)
for i=0,dim[0]-1-1 do begin
 tex_idx_c=img[i,*]
 tex_idx_r=im[i+1,*]
 texture_map[tex_idx_c,tex_idx_r]+=1
endfor
print,img
print,texture_map
```

Output
Img=

0	0	1	1
0	0	1	1
0	2	2	2
2	2	3	3

texture_map=

1	0	0	0
1	1	0	0
1	0	3	0
0	0	1	1

Here texture_map[tex_idx_c,tex_idx_r]+=1 is incrementing only once for the first iteration even though pair(0,0)
occurs twice. Same is the case with pair(0,1) in second iteration and (1,1) in third iteration. It there a way to force the idx to increment twice if the pair(idc,idr) occurs more than 1 in each iteration.

So Actual output is

img=

0	0	1	1
0	0	1	1
0	2	2	2
2	2	3	3

texture=

2	0	0	0
2	2	0	0

1 0 3 0
0 0 1 1

This can be achieved by the following code.

```
pro compute_texture,
 img=[[0,0,1,1],[0,0,1,1],[0,2,2,2],[2,2,3,3]]
 texture_map=LONARR(4,4)
 dim=size(img, /DIMENSION)
  for i=0,dim[0]-1-1 do begin
   for j=0,dim[1]-1 do begin
    tex_idx_c=img[i,j]
    tex_idx_r=img[i+1,j]
    texture_map[tex_idx_c,tex_idx_r]+=1
   endfor
  endfor
 print, img
 print, texture_map
```

Thanks
AKJ