

Hello,everyone

I want obtain a matrix whose some elements are matrixes, how to compile

the program?

example: I want to obtain the following matrix

```
G  I  0  0  0  0  0
I  G  I  0  0  0  0
0  I  G  I  0  0  0
0  0  I  G  I  0  0
0  0  0  I  G  I  0
0  0  0  0  I  G  I
0  0  0  0  0  I  G
```

in which I is an identity matrix,

```
1  0  0  0  0  0  0
0  1  0  0  0  0  0
0  0  1  0  0  0  0
0  0  0  1  0  0  0
0  0  0  0  1  0  0
0  0  0  0  0  1  0
0  0  0  0  0  0  1
```

and G is a similar diagonal matrix:

```
1  2  0  0  0  0  0
2  1  2  0  0  0  0
0  2  1  2  0  0  0
0  0  2  1  2  0  0
0  0  0  2  1  2  0
0  0  0  0  2  1  2
0  0  0  0  0  2  1
```

I can compile the program of the matrix G and I:

PRO Matrix

```
diag=findgen(7)
sub=findgen(6)
super=findgen(6)
```

```
diag[0:6]=1
sub[0:5]=2
super[0:5]=2
```

```
G = DIAG_MATRIX(diag) + $
DIAG_MATRIX(super, 1) + DIAG_MATRIX(sub, -1)
G[0,1:5]=2
```

```
G[1:5,0]=2  
print,G
```

```
I= identity(7)  
print,I
```

```
END
```

but how to get the first matrix in which include the matrix G and I?

The difficulty is that I can not compile the diagonal elements (the smaller matrixes) of the larger matrix. How should I do?

Thanks!

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