
Subject: Re: SPLIT numbers into sub-numbers
Posted by [Michael Galloy](#) on Fri, 22 Jun 2012 21:02:02 GMT
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On 6/22/12 1:52 PM, k_ghreep@yahoo.com wrote:

> Dear all
> I would like to split the following number 20100115 into year, month
> and day
> any suggestions
> Thanks

Something like this:

```
IDL> ts = '20100115'  
IDL> year = long(strmid(ts, 0, 4))  
IDL> month = long(strmid(ts, 4, 2))  
IDL> day = long(strmid(ts, 6, 2))  
IDL> help, year, month, day  
YEAR      LONG    =      2010  
MONTH     LONG    =        1  
DAY       LONG    =       15
```

Mike

--

Michael Galloy
www.michaelgalloy.com
Modern IDL: A Guide to IDL Programming (<http://modernidl.idldev.com>)
Research Mathematician
Tech-X Corporation

Subject: Re: SPLIT numbers into sub-numbers
Posted by [Kenneth P. Bowman](#) on Sat, 23 Jun 2012 01:45:01 GMT
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In article <js2mga\$jh0\$1@dont-email.me>, Michael Galloy <mgalloy@gmail.com>
wrote:

> On 6/22/12 1:52 PM, k_ghreep@yahoo.com wrote:
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> IDL> help, year, month, day
> YEAR      LONG    =    2010
> MONTH     LONG    =      1
> DAY       LONG    =     15
```

Or

```
year = 0
month = 0
day = 0
READS, ts, year, month, day, FORMAT = "(I4,2I2)"
```

Cheers, Ken

Subject: Re: SPLIT numbers into sub-numbers
Posted by [k_ghreep](#) on Sat, 23 Jun 2012 18:59:30 GMT
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On Jun 23, 3:45 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
> In article <js2mga\$jh...@dont-email.me>, Michael Galloy <mgal...@gmail.com>
> wrote:
>
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```

>> YEAR      LONG    =    2010
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>
> Or
>
> year = 0
> month = 0
> day = 0
> READS, ts, year, month, day, FORMAT = "(I4,2I2)"
>
> Cheers, Ken

```

Thanks for your help

first you convert a long number to a string by put it between ' '

but if i have a long array like this

```

20100101  20100101  20100101  20100101  20100102
20100102  20100102  20100102  20100103  20100103
20100103  20100103  20100104

```

and I can't put each sub group between ' '

how I can split this directly?

Best wishes

Khaled

Subject: Re: SPLIT numbers into sub-numbers

Posted by [k_ghreep](#) on Sat, 23 Jun 2012 18:59:55 GMT

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On Jun 22, 11:02 pm, Michael Galloy <mgal...@gmail.com> wrote:

> On 6/22/12 1:52 PM, k_ghr...@yahoo.com wrote:

>

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>> and day

>> any suggestions

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>

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> IDL> day = long(strmid(ts, 6, 2))

> IDL> help, year, month, day

> YEAR LONG = 2010

```
> MONTH      LONG    =      1
> DAY        LONG    =     15
>
> Mike
> --
> Michael Galloywww.michaelgalloy.com
> Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)
> Research Mathematician
> Tech-X Corporation
```

Thanks for your help

first you convert a long number to a string by put it between ' '

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20100101  20100101  20100101  20100101  20100102
20100102  20100102  20100102  20100103  20100103
20100103  20100103  20100104
```

and I can't put each sub group between ' '

how I can split this directly?

Best wishes

Khaled

Subject: Re: SPLIT numbers into sub-numbers

Posted by [Carsten Lechte](#) on Sat, 23 Jun 2012 21:13:56 GMT

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On 23/06/12 03:45, Kenneth P. Bowman wrote:

```
> year = 0
> month = 0
> day = 0
> READS, ts, year, month, day, FORMAT = "(I4,2I2)"
```

Nice, I had not thought of that.

My first idea was:

```
num = 20100115L ; very important: force LONG integer type!
y = num/10000
m = (num-y*10000)/100
d = num - y*10000 - m*100
print, num, y, m, d
```

```
==> 20100115      2010      1      15
```

chl

Subject: Re: SPLIT numbers into sub-numbers
Posted by [k_ghreep](#) on Sat, 23 Jun 2012 22:08:02 GMT
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On Jun 23, 11:13 pm, Carsten Lechte <c...@toppoint.de> wrote:

> On 23/06/12 03:45, Kenneth P. Bowman wrote:

>

>> year = 0

>> month = 0

>> day = 0

>> READS, ts, year, month, day, FORMAT = "(I4,2I2)"

>

> Nice, I had not thought of that.

>

> My first idea was:

>

> num = 20100115L ; very important: force LONG integer type!

> y = num/10000

> m = (num-y*10000)/100

> d = num - y*10000 - m*100

> print, num, y, m, d

>

> ==> 20100115 2010 1 15

>

> chl

for the following array

20100101 20100101 20100101 20100101 20100102

20100102 20100102 20100102 20100103 20100103

20100103 20100103 20100104

I wrote

```
y=lonarr( n_elements(num))
```

```
m =lonarr( n_elements(num))
```

```
d =lonarr( n_elements(num))
```

```
for i = 0, n_elements(num)-1 do begin
```

```
num(i)=num(i)+0L
```

```
y(i) = num(i)/10000
```

```
m(i) = (num(i)-y(i)*10000)/100
```

```
d(i) = num(i) - y(i)*10000 - m(i)*100
```

```
print, num(i), y(i), m(i), d(i)
```

```
endfor
```

and now ran correctly with the following output

```
20100101      2010      1      1
```

```
20100101      2010      1      1
```

```
20100101      2010      1      1
```

20100101	2010	1	1
20100102	2010	1	2
20100102	2010	1	2
20100102	2010	1	2
20100102	2010	1	2
20100103	2010	1	3
20100103	2010	1	3
20100103	2010	1	3
20100103	2010	1	3
20100104	2010	1	4

thank you for your helping

Subject: Re: SPLIT numbers into sub-numbers

Posted by [lecacheux.alain](#) on Sun, 24 Jun 2012 08:36:14 GMT

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On 22 juin, 21:52, k_ghr...@yahoo.com wrote:

> Dear all
 > I would like to split the following number 20100115 into year, month
 > and day
 > any suggestions
 > Thanks

The "IDL way" for extracting dates from such a coded integer array
 might be:

```
IDL> dates = transpose([x/10000],[x mod 10000]/100],[x mod 100])
in which dates will be an array of dimensions 3 x N_elements(x).
```

for instance:

```
IDL> x = [20100401, 20110501, 20120601]
IDL> print, transpose([x/10000],[x mod 10000]/100],[x mod 100])
    2010      4      1
    2011      5      1
    2012      6      1
```

A maybe more "readable", but slower way would be:

```
IDL> dates = intarr(3,N_elements(x)) ;you must define your output
first
IDL> reads, string(x, FORMAT='(i8)'), dates, FORMAT='(i4,i2,i2)'
```

or, if you like Julian days:

```
IDL> jd = dblarr(3,N_elements(x)) ;you must define your output
first
IDL> reads, string(x, FORMAT='(i8)'), jd,
```

```
FORMAT='(C(CYI4,CMOI2,CDI2))'
```

```
IDL> print,jd
```

```
2455288.0    2455683.0    2456080.0
```

```
alx.
```
