Subject: Re: Random ordering
Posted by James Kuyper on Tue, 24 Jun 2003 20:55:36 GMT
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David Fanning wrote:
>
> trouble writes:
>
>> Stuck again. I want to create an integer 1D array from 0 to n (n ~
>> 100) so that the numbers are in jumbled up order so that "nearby"
>> numbers, eg. ABS(difference) < 3, are "far" apart. I think there must
>> be a nice way using MOD rather than bludging it with RANDOMU. Anyone
>> got any suggestions?

Any algorithm than uses MOD rather than RANDOMU must necessarily be
non-random, so I'm assuming a completely regular result is acceptable?
By "jumbled up" do you mean a permutation of indgen(n), as opposed to a
sequence that might contain repeats?
If so, then try

```
 jumble = (jumble_increment(n,m)*INDGEN(n)) MOD n
```

for m=3, which is the limit you've placed on ABS(difference).
jumble_increment(n,m) is the integer between 0 and n which is nearest to
n/m, which does NOT divide 'n'. The algorithm for jumble_increment() is
left as an excersize for the reader (I'm being lazy).