"James Kuyper" <kuyper@wizard.net> wrote:

> takes a 32 bit unsigned long with a value somewhere in the range from 0
> to 1000000, and converts it into a 16 bit signed int, with a range from
> -32768 to 32767.

I took a closer look on what might have gone on. I ran the following
program:

```
z = randomu(seed,30)
a =  long (z*1000000) & print, a
b = ulong (z*1000000) & print, b
i = fix(a)
print, a
```

I found that a(1) was negative (-20848). So I printed

```
print, a[1], format="(z8)"
print, b[1], format="(z8)"
print, i[1], format="(z4)"
```

and got   4AE90 for both a[1] and b[1] and I got AE90 for i[1]

Thus the fix function simply takes the 16 low order bits from either long
or ulong variable and stores it into the result.

Norbert