

Radix sort 1 - preamble

```
1 void radix_sort(int a[], int n, int a_bound)
2 {
3
4     int exp_max=log10((double)a_bound)+1;
5     int a_sort[n];
6     int i,exp;
```

Radix sort 2 - loop

```
7   for (exp=0;exp<exp_max;exp++)
8       {
9           int buckets[10]={0};
10          int digit=pow(10,exp);
11          for (i=0;i<n;i++)
12              buckets[a[i]/digit%10]++;
13          for (i=1;i<10;i++)
14              buckets[i]+=buckets[i-1];
15          for (i=n-1;i>=0;i--)
16              {
17                  buckets[a[i]/digit%10]--;
18                  a_sort[buckets[a[i]/digit%10]]=a[i];
19              }
20          for (i=0;i<n;i++)
21              a[i]=a_sort[i];
22      }
23 }
```