Map a Score into a Score Distribution Histogram Bin

```
int32_t score_to_bin (int32_t score)
{
    int32_t bin = 0;
    score /= 10000;
    while (15 > bin) {
        // test for one power of 10
        bin += 3;
        score /= 10;
    }
    return bin;
}
```

Each loop iteration tests one power of 10 (three bins).

Find Position within Power of 10

```
if (2 > score) { return bin; }
if (5 > score) { return bin + 1; }
if (10 > score) { return bin + 2; }
```

In the first iteration, score has been divided by 10,000 and bin is 0.

In the second iteration, score has been divided by 100,000 and bin is 3.