

4/12/19

$$t_0 = 1$$

$$t_0 = 1$$

$$\text{Sum} = 0$$

$$\text{Sum} = \text{Sum} + t_0$$

$$t_1 = t_0 / 1$$

$$\parallel t_1 = 1$$

$$\text{Sum} = \text{sum} + t_1$$

$$t_2 = t_1 / 2$$

$$\parallel t_2 = 0.5 \text{ or } \frac{1}{2 \cdot 1}$$

$$\text{Sum} = \text{sum} + t_2$$

$$t_3 = t_2 / 3$$

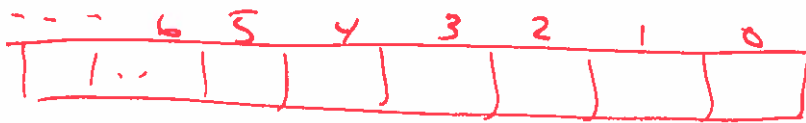
$$\parallel t_3 = \frac{1}{2 \cdot 1 \cdot 3}$$

$$\text{Sum} = \text{Sum} + t_3$$

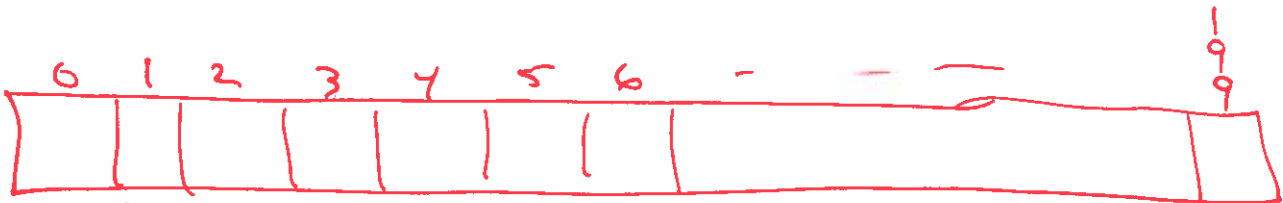
$$t_4 = t_3 / 4$$

$$\parallel t_4 = \frac{t_3}{4} = \frac{1}{3 \cdot 2 \cdot 1 \cdot 4}$$

Previous BigNum Scheme



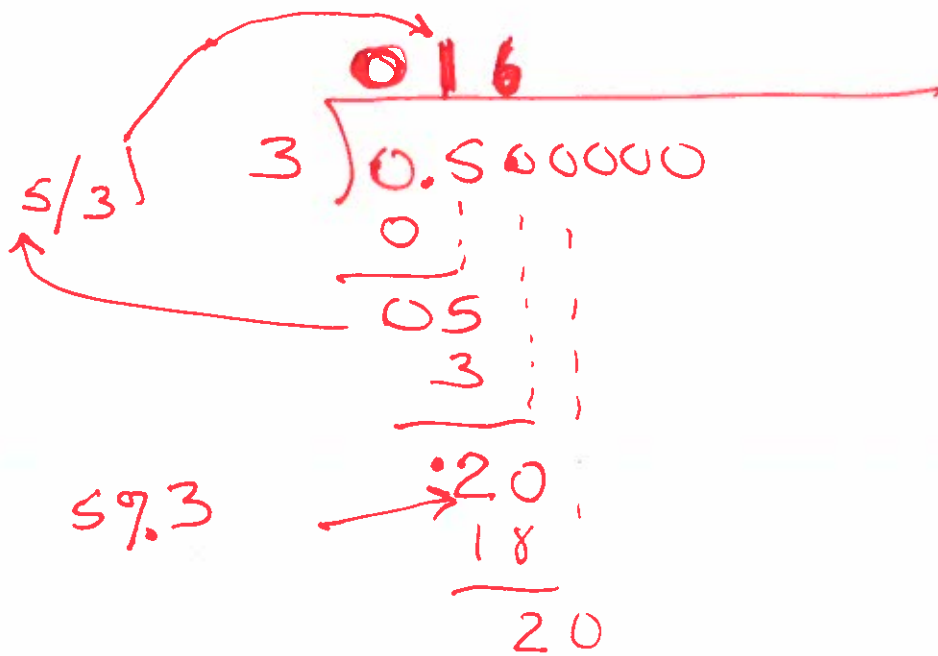
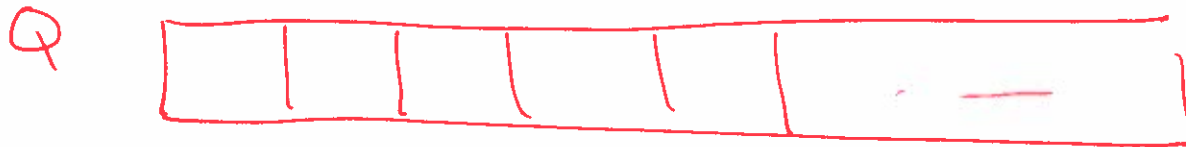
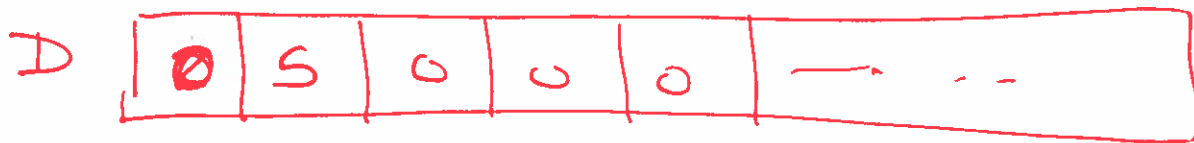
Suggested scheme for eee



ms
digit →

↑
implied
decimal

To add, start at 199
and work to 0

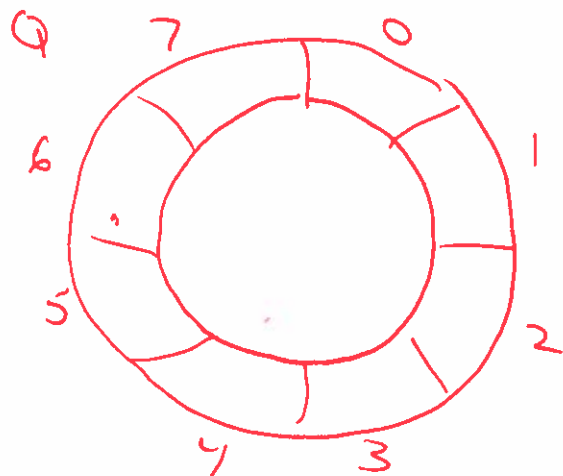
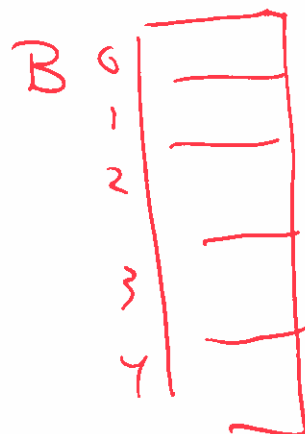
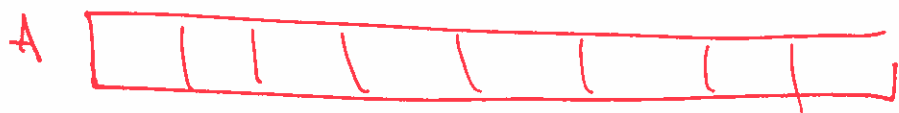


```

void Div DivBigNumScaler(int D[], int Dvsn, int Q[],
                           int numdig)
{
    int i, q, r=0
    for (i=0; i < numdig; i++)
    {
        q = (r*10 + D[i]) / Dvsn;
        r = (r*10 + D[i]) % Dvsn;
        D[i] = q;
    }
}

```

Arrays (one dimensional)



A[6]

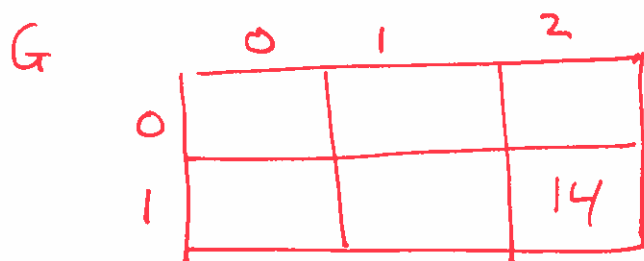
B[x]

Q[y]

Two dimensional array

int G[2][3];

← Rows
← Cols



G[2][1] = 15; // Illegal (but likely no error
15 will be placed where ever
G[2][1] should exist

G[1][2] = 14;