

$$f(n < 10) = n^2$$

$$f(10) = 82$$

$$f(10 < n \ \& \ n - 10 \not\equiv 0 \pmod{9}) = 84 + \left\lfloor \frac{n-10}{9} \right\rfloor 81 + 2 \sum_{i=2}^{(n-10) \bmod 9} i + (n-10) \bmod 9$$

$$f(10 < n \ \& \ n - 10 \equiv 0 \pmod{9}) = 82 + (n-10)9$$