Conjecture. For any integer n that has 5 as the last digit, n^2 will have 25 as the last two digits.

Proof. Let n be an integer with 5 as the last digit.
Then $n = 10j + 5$ for some integer j.
Therefore:

$$\begin{aligned} n^2 &= (10j + 5)(10j + 5) \\ &= 100j^2 + 100j + 25 \\ &= 100j(j + 1) + 25 \end{aligned}$$

Let $\ell = j(j + 1)$. Then we have:

$$n^2 = 100\ell + 25$$

which is to say:

$$n^2 \equiv 25 \pmod{100}$$

Since congruence mod 100 preserves the last two decimal digits, n^2 ends in 25.

$\square$