Worksheet 6

You may use Python for the following. You may use any previously written code.

1. Find all solutions to $x^2 \equiv 1 \pmod{323}$. (Hint: factor 323 and use Sun Tzu's Theorem.)
2. Apply the Pollard $p-1$ algorithm to 144555289 with $a = 5$ and $B = 10$.
3. Find all solutions to $x^2 \equiv 1 \pmod{144555289}$.