**Calculate Achievable theoretical accuracy As Per Given Below:**

1. Determine the ADC resolution: In the case of the PIC18F4580, the ADC has 10-bit resolution, so it can provide 1024 discrete values.

2. Calculate the voltage step size: Divide the voltage range (100V) by the ADC resolution (1024) to obtain the voltage step size per digital increment.

Voltage Step Size = (Voltage Range) / (ADC Resolution)

Voltage Step Size = 100V / 1024

Voltage Step Size = 0.09765V