Observation table:

S.N.	Velocity of sound at laboratory temperature $v_t\ (m/s)$	Resonating lengths		Frequency of tuning fork $f\ (Hz)$ $f = \frac{v_t}{2(l_2 - l_1)}$	Mean f (Hz)	End correction e (m) $e = \frac{l_2 - 3l_1}{2}$	Mean e (m)
		First resonating length $l_1\ (m)$	Second resonating length $l_2\ (m)$				
1.							
2.							
3.							
4.							

CALCULATIONS:

From above table,

Frequency of tuning fork, $f = \ldots\ldots\ldots Hz$

End correction of tube, $e = \ldots\ldots\ldots m$

PERCENTAGE ERROR:

- **Frequency of tuning fork**:

  Standard value of frequency of tuning fork, $f_s = \ldots\ldots\ldots\ldots\ Hz$

  Observed value of frequency of tuning fork, $f_o = \ldots\ldots\ldots\ldots\ Hz$

  Therefore, $\%\ error = \left|\frac{Standard\ value - observed\ value}{standard\ value}\right| \times 100\%$

  $= \ldots\ldots\ldots\ldots\ldots..$

  $= \ldots\ldots\ldots\ldots\ldots..\ \%$

- **End correction of tube:**

  Standard value of end correction of tube, $e_s = 0.3\ d = \ldots\ldots\ldots\ldots\ m$

  Observed value of end correction of tube, $e_o = \ldots\ldots\ldots\ldots\ m$

  Therefore, $\%\ error = \left|\frac{Standard\ value - observed\ value}{standard\ value}\right| \times 100\%$

  $= \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$

  $= \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$

  $= \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$

  $= \ldots\ldots\ldots\ \%$

RESULT:

The frequency of tuning fork has been found to be … …. ... with error……and the end correction of the given tube has been found to be …… … with … …. error.