SOLUTION

Exercise for Chapter 4_1

1) C_0= 2 pF
2) The simplest configuration is a bridge using the cap inside the equipment and two other similar resistors.
3) S= 25 mV/μm
4) The required gain is G= 20

$$V_0 = \left(1 + \frac{R_1}{R_2} + 2\frac{R_1}{R_g}\right)(V_2 - V_1) + V_{ref}$$

R_1=R_2=9 kΩ R_g= 1kΩ V_{ref}=Vg