# Assignment on Level Measurement

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1. List liquid and non-liquid mediums, conductive and non-conductive mediums which are required level measurement system. Write suitable sensing systems (atleast 2 in each type of medium)
2. Select level measurement for closed vessels has normal temperature liquids.
3. How do integrate an ON/OFF water pump control system with float level system? Explain with diagram
4. What is difference between displacer level switch and float level switch? Explain with diagram. Why should we use displacer instead of simple float switch?
5. Explain capacitance type level measurement for conductive liquids with diagram. When you get 10 uF change for 1000 liters volume of liquid then find total capacitance for 10,000 liters. Consider initial capacitance for 1000 liters is 100 uF

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1. Where can you prepare magnetic level switches are indicators in industry? Explain working principle with diagram
2. Explain capacitance type level measurement system block diagram for non-conductive liquids
3. Can we use radar level measurement system for coal powder storage tanks? If it is yes then explain with block diagram. If it is not then suitable level measurement system
4. Why should we prepare ultrasonic level measurement instead of radar level measurement? Explain the principle. Calculate level of liquid in a tank in meters when ultrasonic sound speed in the medium is 200 ft/s. The time calculated is 200 ms.
5. Compare differential pressure level measurement and radiation level measurement principles with diagrams. Discuss about sensors used in the measurements systems.