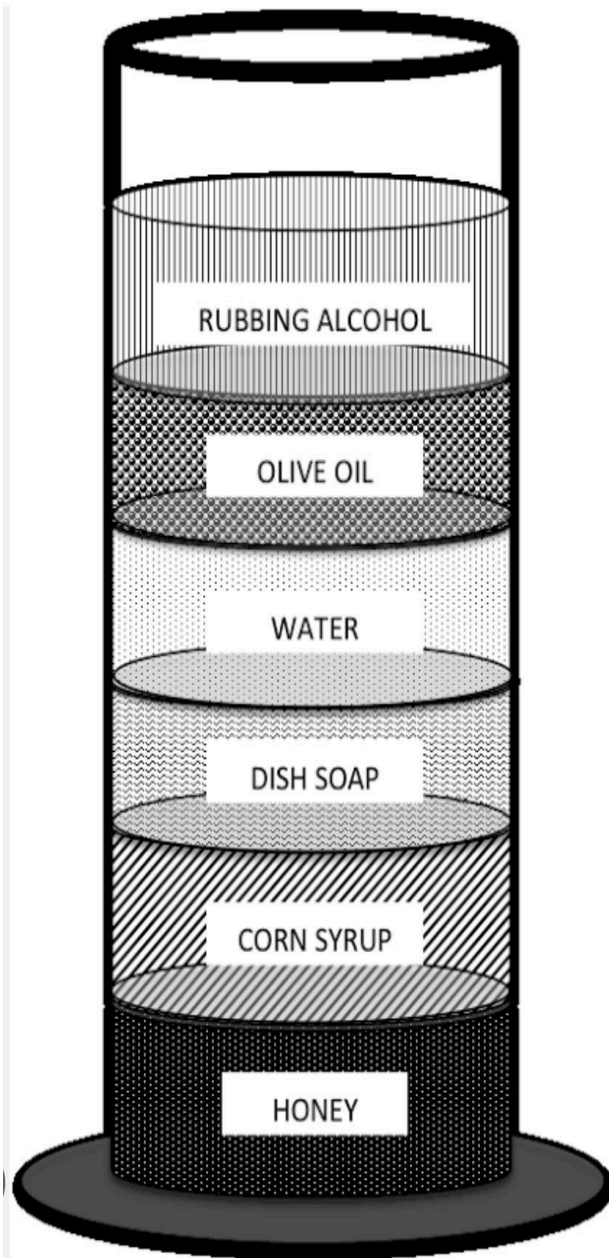


### Case study

A . During an experiment in class, students have added five different liquids in the single glass as you can see in the picture. They were very happy as they could see different layers of liquid.

After doing the experiment a few questions arise in their mind. You help them to find out the answers.



1 .Different layers of liquid is formed because

- These liquids have different densities.
- These liquids have the same densities.
- Both a and b is correct
- None of these.

2. In the glass as you go up the density of liquids will

- a) Decrease                      b) increase
- c) remain same                  d) at first decrease then increase

3. Alcohol is miscible in water.

- a) False                              b) True
4. If you drop iron nail in the glass having density greater than honey as given in picture.

- a) Then iron nails will float on ethyl alcohol because iron has lesser density than liquid.
- b) Then iron will cross all liquid but float on honey.
- c) Iron will sink down at the bottom as it is solid in nature and solid has higher density than liquid.
- d) None of the above.

5. What is the nature of mango squash solution?

- Miscible                              b) Immiscible