Assignment : CSE 103

IFTEKHAR HAKIM KAOWSAR

ROLL:1705045

Sec-A

**Problem 1:**

Solve:

Here I need to ask just one question.His answer to my question always indicates to the University Road.

The question is:

Between two roads to Varsity and Post Office, what is the other road of your answer if I ask you which one is the Varsity Road?

If he lies at first and tells truth in the next,his answer to “which one is the varsity road” indicates the Post office road.And his answer to the whole question is the Varsity road.

If he tells truth at first and lies in the next,his answer to “which one is the varsity road” indicates the Varsity Road.And his answer to the whole question is the Varsity road too.

So,I can get the exact path.

**Problem 2:**

Solve:

My question will be:

Between two roads to Varsity and Post Office, what is the other road of your answer if I ask you which one is the Post Office Road?

If he consistently tells truth,

his answer to “which one is the Post Office Road” indicates the Post Office Road.His answer to the whole question will be the Varsity Road.

If he consistently lies,

his answer to “which one is the Post Office Road” indicates the Varsity Road.His answer to the whole question will be the Varsity Road too.

**Problem 3:**

For a case,the distance between A and B is 40 km.And it is maximum.

From A,if I walk 20 km to North,the point I reached can be the North Pole.

And from there to walk 20km to south,I can head to South in different way.In one way,B will be just opposite to A,distance being 20+20=40 km.In another way,the distance is 0.So the maximum distance is 40km.

More distance is not achievable.