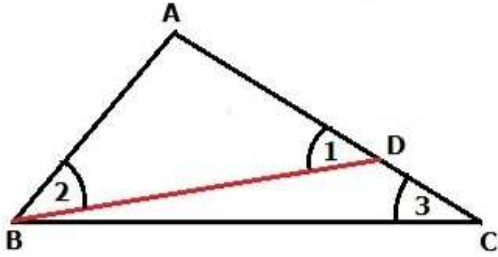


DevAnoop. 

given - In $\triangle ABC$, $AC > AB$
to prove - In $\triangle ABC$

$$\angle ABC > \angle ACB$$



construction - Take a point D on AC, s.t. $AD = AB$,
join BD

proof $\angle 1$ is exterior angle of $\triangle DBC$

$$\therefore \angle 1 > \angle 3$$

$$\text{But } \angle 1 = \angle 2$$

[In $\triangle ABD$, $AB = AD$
 $\angle 2 = \angle 1$ isosceles \triangle prop]

$$\therefore \angle 2 > \angle 3 \dots \textcircled{I}$$

$$\angle ABC > \angle 2 \dots \textcircled{II}$$

[$\angle 2$ is a part of $\angle ABC$]

From \textcircled{I} , \textcircled{II}

$$\angle ABC > \angle 3$$

$$\angle ABC > \angle ACB$$

\therefore In a \triangle longer side has greater side opp to it.