

## Not all shade is the same

After a bike ride, everybody looks for a place in the shade. Some sit under the patio umbrellas in front of the youth hostel, while others sit in the shade of the nearby beech tree.

“Come sit with us,” Meike calls to her friend Johanna. But Johanna doesn’t want to trade her place under the tree.

“You come over here. It’s a little cooler here than under your umbrella!”



Meike can’t believe that. How could it be cooler under a tree than under such a colorful umbrella?

### Your task

Explain why on hot summer days it is usually cooler in the shade of a tree with a thick canopy of leaves than in the shade of a patio umbrella covered with fabric.

If you want to **use the online hints to solve the task**, scan the QR code with the **H**.



You can try to solve the task without using the provided hints. When you are finished, compare your result with the sample solution. To do so, scan the QR code with the **S**.

