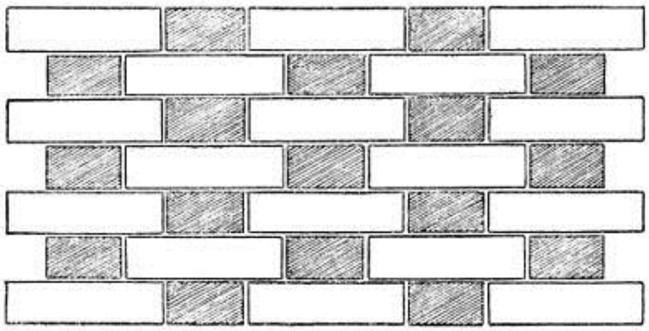
S No.	Mini-project description
2	**Brick Wall Problem** This is project which covers how threads communicate and access same resource at the same time. Two workers are building a wall. They are placing bricks one by one. The wall has to be created like a checker board. One worker is responsible for placing red bricks while the other worker is responsible for placing black bricks.  Create a program which will arrange the bricks in this fashion. **How to create the wall:** Create an ArrayList of String type named ‘WALL’ and store ‘RED’ and ‘BLACK’ strings in the ArrayList. ***[Refer previous modules for the usage of ArrayList]*** **How to create the two workers:**

Each worker is controlled by a thread.

One thread should be responsible for inserting ‘RED’ in the array and another thread should be responsible for inserting ‘BLACK’ in the array.

The execution should be synchronized so that the thread which inserts red brick should not insert ‘RED’ more than once before the thread which inserts black brick executes.

How to make the two threads communicate:

We can make use of the inter-thread communication mechanisms- wait() and notify().

[Explore More]

Expected output:

RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED

BLACK RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED

RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED

BLACK RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED **BLACK** RED