

LAB#4**Start,SleepandStopmethodsof multithreading****OBJECTIVE:**

Understanding concurrency by implementing start, sleep and stop thread functions

LabTask:

By using start, stop and sleep methods of threading, print alphabets of English from A-Z.

(Hint:

use `math.random` method for getting random numbers and then convert them into characters, print 26 characters under run method loop with fluctuating visualization through sleep method).

```

1  class AlphabetThread extends Thread {
2      @Override
3      public void run() {
4          try {
5
6              for (int i = 0; i < 26; i++) {
7                  char ch = (char) ('A' + i);
8                  System.out.print(ch + " ");
9
10                 // Sleep for a random duration between 200-1000 ms
11                 int sleepTime = (int) (Math.random() * 800 + 200);
12                 Thread.sleep(sleepTime);
13             }
14         } catch (InterruptedException e) {
15             System.out.println("Thread hai");
16         }
17     }
18 }
19
20 public class NewClass {
21     public static void main(String[] args) {
22         // Create thread object
23         AlphabetThread t = new AlphabetThread();
24         t.start();
25     }
26 }
```

OUTPUT:

```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z BUILD SUCCESSFUL (total time: 14 seconds)
```

GITHUB SCREENSHOT LAB 4

The screenshot shows a GitHub repository page for the user 'Zayan10' with the repository name 'SCD-LABS-1-14-'. The repository is private, as indicated by the 'Private' badge. The main branch is 'main', and there is 1 Branch and 0 Tags. A search bar allows navigating to specific files. The commit history shows five commits:

File	Commit Message	Time
LAB 1 SCD.docx	Add files via upload	2 weeks ago
Lab3.docx	Add files via upload	last week
Lab4.docx	Add files via upload	now
README.md	Initial commit	2 weeks ago
SCD LAB 2 ...docx	Add files via upload	2 weeks ago

The 'README' file is displayed below the commit history, showing the text 'SCD-LABS-1-14-' followed by 'LABS'.