LAB 4

Start, Sleep and Stop methods of multithreading

Objective : Understanding concurrency by implementing start, sleep and stop thread functions..

Task #1: By using start, stop and sleep methods of threading, print alphabets of English from A-Z.

```java
1  class AlphabetThread extends Thread {
2      private volatile boolean running = true;
3      public void terminate() {
4          running = false;
5      }
6      public void run() {
7          for (int i = 0; i < 26 && running; i++) {
8              try {
9                  int randDelay = (int) (Math.random() * 500);
10                 Thread.sleep(randDelay);
11             } catch (InterruptedException e) {
12                 System.out.println(e);
13             }
14             char letter = (char) ('A' + i);
15             System.out.print(letter + " ");
16         }
17         System.out.println();
18     }
19     public static void main(String[] args) {
20         AlphabetThread t1 = new AlphabetThread();
21         AlphabetThread t2 = new AlphabetThread();
22         AlphabetThread t3 = new AlphabetThread();
23         t1.start();
24         t2.start();
25         t3.start();
26         try {
27             Thread.sleep(2000);
28         } catch (InterruptedException e) {
29             System.out.println(e);
30         }
31         t3.terminate();
32         System.out.println("\nThread t3 is stopped");
33     }
34 }
```

```
A B A B A C B D E C C F D D E F G H G E
Thread t3 is stopped
F I
H G I H I J J K K L M L N O M P N O Q R P S T Q R U S V W T U V X W Y X Z
Y Z
```