LAB # 4

Start, Sleep and Stop methods of multithreading

Lab Task:-

➢ 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).

Code:-

```java
AlphabetPrinter.java    ×       AlphabetThread.java
1    import java.util.Random;
2    class AlphabetPrinter extends Thread {    2 usages
3        public void run() {
4            System.out.println("Thread started...");
5
6            Random random = new Random();
7
8            for (int i = 0; i < 26; i++) {
9                char letter = (char) ('A' + random.nextInt( bound: 26));
10               System.out.print(letter + " ");
11
12               try {
13                   Thread.sleep( millis: 200 + random.nextInt( bound: 600));
14               } catch (InterruptedException e) {
15                   System.out.println("Thread interrupted.");
16               }
17           }
18           System.out.println("\nThread completed printing alphabets.");
19       }
20   }
```

```java
AlphabetPrinter.java        AlphabetThread.java    ×
1    public class AlphabetThread {
2        public static void main(String[] args) {
3            AlphabetPrinter thread = new AlphabetPrinter();
4
5            thread.start();
6            try {
7                Thread.sleep( millis: 5000);
8            } catch (InterruptedException e) {
9                System.out.println(e);
10           }
11
12           thread.stop();
13           System.out.println("Thread stopped by main method.");
14       }
15   }
```

Output:-

```
C:\Users\lab2\.jdks\openjdk-25\bin\java.exe "-javaagent:C:\Program Files\JetBrains\Int
Thread started...
R F L L Z O S A V N Exception in thread "main" java.lang.UnsupportedOperationException
    at java.base/java.lang.Thread.stop(Thread.java:1557)
    at AlphabetThread.main(AlphabetThread.java:16)
R L A T N U W A Q K W W V H Z V
Thread completed printing alphabets.

Process finished with exit code 1
```