

**Problem 1**

Write a program described below:

- The program creates several threads passing to their constructors consecutive letters; each thread prints from time to time its letter (the time interval between printing could be a random number of milliseconds from the interval [100, 1000]).
- All threads are started, but the first is suspended.
- Another thread, let's call it the main thread, from time to time (say, every 5 seconds) resumes the thread that is suspended and suspends the next one — cyclically, i.e., if the last one is resumed, the first is suspended.
- After several such cycles (for example, ten of them), the main thread stops all the threads which in turn print a message just before exiting.

**Important:**

All threads are created once, at the beginning of the program.

The methods **stop**, **resume**, **suspend**, and **destroy** from the **Thread** class are inherently unsafe and must not be used!

The output of the program could look as shown below. Here, five threads were launched, corresponding to letters 'a', ..., 'e', but increasing the number of threads/letters should be a matter of modification of one line only.

```
ebdcebcdbedcbedcdbcdbecdbdedbce
Resuming a, suspending b: aedcaedcaecdeadceacdeacdeacade
Resuming b, suspending c: bdaebdebaaedbdbaedabedbaebda
Resuming c, suspending d: cbeacebaceacbaecbabecabecbaceae
Resuming d, suspending e: dbacdbacbadcbacddcbadacbdcabd
Resuming e, suspending a: ecbdecbdecdbdecdbdecdbecdbecbd
Resuming a, suspending b: aecdaecdeacdecadedcaedacdeace
Resuming b, suspending c: bdaedbaedbedabedabedaebdeabd
Resuming c, suspending d: cbaeacebabecacebaecbaebcaebceab
Resuming d, suspending e: dcabdcabdcadbcacdbababcdab
Resuming e, suspending a: e
Thread b exits
Thread d exits
Thread a exits
Thread e exits
Thread c exits
```