The example given in lecture 5, page 5 where functions in three different processes (or threads) should run in sequence is solved here again if each function is repeated inside a loop:

```
Thread 1                    Thread 2                    Thread 3

.......                     .......                     ........
for (i=0; i<100; i++)       for (j=0; j<100; j++)       for (k=0; k<100; k++)
{down (s1);                 {down (s2);                 {down (s3);
Printf (“A “);              printf (“B “);              printf (“C “);
up (s2);}                   up (s3);}                   up (s1);}
```

Where initially s1=1 and s2=s3=0

Write three Windows threads that implement the above solution.

Send a report of your solution to helsayed@eng.cu.edu.eg. Due date is April 17,2020.

Your report should include:

- Program listing.
- How you ran the program (compiler type,…etc.)
- Screenshots of threads output without using the semaphores. Run the program many times to see if the output pattern changes.
- Screenshot of output with semaphores added.
- Your comments.