prog_05_131

```java
package test;

public class prog_05_131 {
    static int matrixA[][],matrixB[][],matrixC[][];
    static class Main1 extends Thread
    {
        int sz;
        Main1(int size){sz = size;}
        public void run() {
            int i,j,k;

            for(i=0;i<sz;i++) {
                for(j=0;j<sz;j++) {
                    for(k=0;k<sz;k++) {
                        matrixC[i][j] = matrixA[i][k]*matrixB[k][j];
                    }
                }
            }
            System.out.println("Finishing thread 1...");
        }
    }
    static class Main2 extends Thread
    {
        int sz;
        Main2(int size){sz = size;}
        public void run() {
            int i,j,k;
            for (i=0;i<sz;i++) {
                for(j=0;j<sz;j++) {
                    for(k=0;k<sz;k++) {
                        matrixC[i][j] = matrixA[i][k] *matrixB[k][j];
                    }
                }
            }
            System.out.println("Finishing thread 2...");
        }

    }
    static class Main3 extends Thread
    {
        int sz;
        Main3(int size){sz = size;}
        public void run() {
            int i,j,k;
            for(i=0;i<sz;i++) {
                for(j=0;j<sz;j++) {
                    for(k=0;k<sz;k++) {
                        matrixC[i][j] = matrixA[i][k]*matrixB[k][j];
                    }
                }
            }
            System.out.println("Finishing thread 3...");
        }
    }
    public static void main(String atgs[]) {
        int msize = 512,i,j;

        matrixA = new int[msize][msize];
        matrixB = new int[msize][msize];
        matrixC = new int[msize][msize];

        prog_05_131.Main1 main1 = new prog_05_131.Main1(msize);
        prog_05_131.Main2 main2 = new prog_05_131.Main2(msize);
        prog_05_131.Main3 main3 = new prog_05_131.Main3(msize);

        main1.setPriority(7);main1.start();
        main2.setPriority(1);main2.start();
        main3.setPriority(10);main3.start();

        try {
            main1.join();
            main2.join();
            main3.join();
        }catch(InterruptedException e) {}
        System.out.println("Finishing main thread...");

    }
}
```

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Finishing thread 2...
Finishing thread 1...
Finishing thread 3...
Finishing main thread...
```

prog_05_23

```java
package test;

class Scheduler extends Thread{
    Thread[] runq;
    int slice_unit,tcnt;

    Scheduler(int tunit){
        slice_unit = tunit;
        runq = new Thread[5]; tcnt = 0;
    }
    void add_thread(Thread th) {
        runq[tcnt++] = th;
    }
    void cpu_yield(int pri) {
        try {
            Thread.sleep(pri*slice_unit);
        }
        catch(InterruptedException e) {};
    }
    public void run() {
        int pri = 1, t;
        Thread cth;
        while(tcnt ==0);
        while(pri > 0) {
            for(t=pri = 0;t<tcnt;t++) {
                cth = runq[t];
                if(cth.isAlive()) {
                    pri = cth.getPriority();
                    cth.setPriority(8);
                    /*cth.resume();*/cpu_yield(pri);
                    if (cth.isAlive()) {
                        cth.setPriority(pri);
                    }
                }
            }
        }
    }
}

public class prog_05_23 {
    static int matrixA[][],matrixB[][],matrixC[][];
    static class Main extends Thread
    {
        int id,sz;
        Main(int n,int size){id = n; sz = size;}
        public void run() {
            int i,j,k;

            for (i=0;i<sz;i++) {
                for(j=0;j<sz;j++) {
                    for(k=0;k<sz;k++) {
                        matrixC[i][j] = matrixA[i][k]*matrixB[k][k];

                    }
                }
            }
            System.out.println("Finishing thread" + id + "...");
        }
    }

}
```

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Finishing thread 1...
Finishing thread 3...
Finishing thread 2...
Finishing main thread...
```