Test

**public class Test {**

**public void test1() {**

MyThread1 t1 = new MyThread1(1);

MyThread1 t2 = new MyThread1(2);

t1.start(); // run

t2.start(); // run

}

// Anzeige im Taskmanager

**public void test2() {**

int n=100000;

MyThread2 t1 = new MyThread2(1,n);

MyThread2 t2 = new MyThread2(2, n);

t1.start();

t2.start();

} // Test2

// Anzeige im Taskmanager, Thread mit einem Array erstellen und starten

**public void test3() {**

final int MAX\_THREAD=10;

int n=50000;

MyThread2[] t = new MyThread2[MAX\_THREAD];

for (int i=0; i<t.length; i++) {

t[i] = new MyThread2(i+1,n);

}

for (int i=0; i<t.length; i++) {

t[i].start();

}

} // Test3

**public void test4(int anzThread) {**

final int n=800000000;

MyThread4[] t = new MyThread4[anzThread];

double schrittweite = n / t.length;

for (int i=0; i<t.length; i++) {

t[i] = new MyThread4(i+1,schrittweite);

}

for (int i=0; i<t.length; i++) {

t[i].start();

}

try {

for (int i=0; i<t.length; i++) {

t[i].join();

}

}

catch (InterruptedException e) {

System.err.println("Fehler: "+e.toString());

}

double flaeche=0.0;

for (int i=0; i<t.length; i++) {

flaeche += t[i].summe;

}

//System.out.println("Fläche Gesamt: "+flaeche);

} // Test4

**public void test5() {**

final int MAX\_THREAD=20;

int n=50000;

MyThread5[] t = new MyThread5[MAX\_THREAD];

double xa=0.0;

double xsw = 1;

double xe = 200;

double schrittweite = (xe-xa) / t.length;

double x1=0.0;

double x2= x1 + schrittweite;

for (int i=0; i<t.length; i++) {

t[i] = new MyThread5(i+1,x1,xsw,x2);

x1+=schrittweite;

x2= x1 + schrittweite;

}

for (int i=0; i<t.length; i++) {

t[i].start();

}

try {

for (int i=0; i<t.length; i++) {

t[i].join();

}

}

catch (InterruptedException e) {

serr

}

double flaeche=0.0;

for (int i=0; i<t.length; i++) {

flaeche += t[i].summe;

}

System.out.println("Fläche Gesamt: "+flaeche);

} // Test5

}

# MyThread1

public class MyThread1 extends Thread {

int nr=0;

**public MyThread1(int nr) {**

this.nr = nr;

}

@Override

**public void run() {**

for (int i=0; i<100; i++){

System.out.println("in run: nr:" + nr+" i: "+i);

}

}

}

**public class MyThread2 extends Thread{**

int nr=0;

int n=0;

**public MyThread2(int nr, int n) {**

this.nr = nr;

this.n=n;

}

@Override

**public void run() {**

for (int i=0; i<n; i++){

for (int j=0; j<n; j++){

double d = Math.sin(360/180\*3.141592653);

}

}

System.out.println("Ende von Thread: nr:" + nr);

}

}

public class MyThread4 extends Thread {

double xe=0;

double summe=0.0;

int nr=0;

public MyThread4(int nr, double xe ) {

this.nr = nr;

this.xe = xe;

//System.out.println("nr: "+nr+" xe: "+xe);

}

**double fx(double x) {**

return Math.sin(1);

}

**public void run() {**

for (double x=0; x<xe; x+=1) {

double y = fx(x);

double flaeche = y;

//System.out.println("nr: "+nr+" x:"+x+" Fläche: "+flaeche);

summe+=flaeche;

}

//System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Fläche: "+summe);

}

}

**public class MyThread5 extends Thread {**

double xa=0;

double xsw=0;

double xe=0;

double summe=0.0;

int nr=0;

public MyThread5(int nr, double xa, double xsw, double xe ) {

this.nr = nr;

this.xa=xa;

this.xsw = xsw; // h

this.xe = xe;

System.out.println("nr: "+nr+" xa: "+xa+" xsw: "+xsw+" xe: "+xe);

}

double fx(double x) {

return 4;

}

**public void run() {**

for (double x=xa; x<xe; x+=xsw) {

double y = fx(x);

double flaeche = y\*xsw;

//System.out.println("nr: "+nr+" x:"+x+" Fläche: "+flaeche);

summe+=flaeche;

}

//System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Fläche: "+summe);

}

}