is there zombie thread?
   Zombie -> A process which is getting executed without any parent.
   Threads -> Jvm will create main thread----> using main thread -> our threads
                  MainThread(P) -------------> UserDefinedThread(Child)

we are not making the main to daemon thread then y it is showing the exception
      DaemonThread-> A thread which runs in the background and supports other
threads
                                    are called "Daemon thread".
                                Main thread is not a Deamon thread it is normal
thread.
                               Excpetion will come only if
                                    a. u start a thread and then try to make it as
"Daemon".

can we invoke garbage collector implicitly sir ?
      yes ,it is possible through finalize().(Garbagecollector topic)

Q> Can we create our own immutable class?
            Immutable -> Once object created with a data,if we try to make a change
then
                                 that change will not happen on the same object
rather new Object
                                 will be created.
                                             eg: String,Wrapper class.

eg:
  class CreateImmutable{
            //instance variable
            private int i;

            //constructor
            CreateImmutable(int i){
                  this.i=i;
            }

            //instance method
            public   CreateImmutable   modify(int i){
                        if(this.i ==i)
                              return this;//return current object
                        else
                              return new CreateImmuatable(i);//return by creating
new object
            }

 }
public class Demo{
      public static void main(String[] args){
                  CreateImmutable c1= new CreateImmutable(10);
                  CreateImmutable c2= c1.modify(10);
                  CreateImmutable c3= c1.modify(100);
                  System.out.println(c1==c2);//true
                  System.out.println(c1==c3);//false
      }
}

is it possible to set priority for daemon threads? if yes then is this legal or
possible

: t1.setPriority(10) where t1 is daemon thread?
Daemon thread priority if u give then also no impact as they run behind the main thread

synchronized
When multiple threads tries to act on single resource simultaneously there would be a problem
of "Data Inconsistency". This problem can be avoided through "synchronized keyword".
synchronized can be applied at 2 levels
a. method level
a. instance method level-> JVM will put lock of the Thread at Object level
b. static method level -> JVM will put lock of the Thread at class level.
b. block level

```
class Demo{
      public synchronized void m1(){

      }
      public synchronized void m3(){

      }

      public static synchronzied void m2(){

      }
      public static synchronzied void m4(){

      }
      public  void m5(){

      }

}
```

Threads
t1-> m1()[Object level lock is required]
t2-> m3()[t2 will be waiting till object level lock is released by t1]
t3-> m2()[Class level lock is required]
t4-> m4()[t4 will be waiting till Class level lock is released by t3]
t5-> m5()[No lock is required]

Hi sir what happens if we create two threads and assign them with same priority. Will conflict occur?
No, becoz TS uses differetnt algorithm to assign the cpu time.

how a string is used as a resource in synchronized block
syntax: synchronized(object){

}

why main thread has default priority of 5 as max priority allowed is 10 for higher priority
JVM thread priority
1 5 10
MIN AVG MAX

Thread.sleep(10) how it invoke sleep for current thread?
Thread.currentThread().sleep(1000);

```
pubic class Thread{
            public static void sleep(int millisecond){
                        //logic of sleep
            }
}
```

If join() is not best case, what’s its purpose please?
task are dependent on each other and they are such that without completeing one
task other task should not be continued, in these scenarious we use "join()".
eg:

```
wedding card                distrubution of              book wedding
  printed                         wedding card                  hall
      t1                                        t2
t3
                                        |
|
                                        |
|
                                    t1.join()
t2.join()
```

if we give high priority for thread1 and lower priorities for thread2 and 3 will thread1 go to
running state first or still it depends on thread scheduler's internal logic?
thread1 -> 10
thread2 -> 1
thread3 -> 1
since the thread1 is having high priority it will enter into running state.
b/w thread2 and thread3 Threadscheduler decides whom to give the cpu time.

how can we say stringbuffer is synchronized,reason?
StringBuffer -> Jdk1.0
All the methods present in StringBuffer are synchronized so we say the StringBuffer
resource is "synchronized".
Any resource if it is synchornzied it means the resource is "Thread safe".

how to check how mamy threads are runing currently
Thread.isAlive() -> returns boolean value through which u can check
vch thred is alive.

q. sir, as you said in try(R) R should be the classes which implement AutoClosable(I),
so are there any resource classes which do not implement it but are required in our programming?
In that case we should write finally block, right??

try(R) ----->An object which implements java.io.AutoCloseable
multiThreading-> resource it is any Object
if u r using try(R) compulsorily it should implement AutoCloseable otherwise use
try{} catch(){}finaly{}

can you pls explain the relationship (if any) between Java Thread, OS Thread and

number of processors on the host?
Java -> Architectural neutral
it would not worry about the underyling os and its architecture becoz of JVM.
OS -> os concepts and its alogrithms
no of processors -> Microprocessor architecture.

sir is it the rule that in case of single resources for multiple thread object we use synchroed keyword
if required? or we can use synchrozed for different resources?
synchronzied -> one resource used by multiple threads.
to avoid data inconsistency we use "synchronized".

Can we set main Thread priority less than user-defined threads? -> please answer
main() -> 5
t1 -> change(t1.setPriority).
If we change the priority order of execution will be different and we can't predict results.