

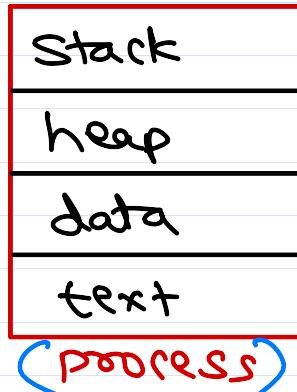
Process vs Thread

main.exe

header
text
data
symtable

executable
Code
(Bytecode)

→ Loader
(part of OS)



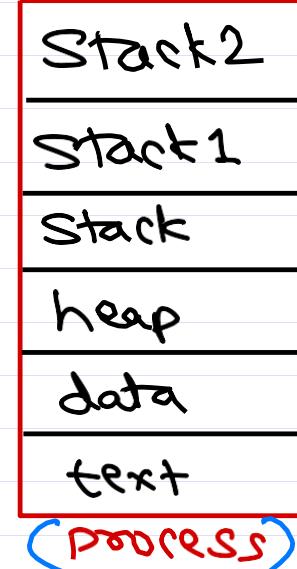
OS keep info
about process
execution.
→ PCB

process is program under execution.

Thread is a light-weight process.

Threads are used to execute multiple tasks concurrently within a process.

Process is like a container that holds resources required for execution;
while thread is unit of execution/scheduling.



Thread creation

extends Thread

```
class MyThread extends Thread {
```

```
    @Override  
    void run() {
```

```
        // code
```

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in main(),

```
MyThread t1 = new MyThread();  
t1.start();
```

If a java class is already inherited from a class, it cannot be inherited from Thread class (multiple class inherit not allowed)

implements Runnable

```
class MyRunnable implements Runnable {
```

```
@Override
```

```
void run() {  
    // code
```

3

3
in main(),

```
MyRunnable mr = new MyRunnable();  
Thread t2 = new Thread(mr);  
t2.start();
```

Even if class is inherited from other class, implementing Runnable is possible. Since Runnable is functional interface, we can use lambda expression.

