

8/12/2020

WEEK-11
EXTRA PROGRAMS

18M19CS079
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1]

class NewThread implements Runnable

{ Thread t;

NewThread()

{

t = new Thread(this, "sum");

System.out.println("CT: " + t);

t.start();

}

public void run()

{

int sum = 0;

try

{

for (int n = 1; n <= 100; n++)

{

if (n % 2 != 0)

{

sum = sum + n;

}

else

Thread.sleep(100);

}

System.out.println("Sum of all odd numbers between 1-100\n" + sum);

}

1) catch (InterruptedException e)

```
{
    System.out.println("Odd Thread Interrupted");
```

```
}
```

```
System.out.println("Odd Thread quitting");
```

```
}
```

```
}
```

```
class main
```

```
{
```

```
public static void main(String s[])
```

```
{
```

```
int sum = 0;
```

```
NewThread n1 = New NewThread();
```

```
try
```

```
{
```

```
for (int n = 1; n <= 100; n++)
```

```
{
```

```
if (n % 2 == 0)
```

```
{
```

```
sum = sum + n;
```

```
}
```

```
else
```

```
Thread.sleep(700);
```

```
}
```

```
System.out.println("Sum of all even numbers between 1-100: \n" + sum);
```

```
}
```

```
catch (InterruptedException e)
```

```
{
```

1) System.out.println("Even Main Thread interrupted");

}

System.out.println("Even Main Thread quitting");

}

}

2)

import java.util.Random;

class Square extends Thread

{

int x;

Square(int n)

{

x = n;

}

public void run()

{

int sqr = x * x;

System.out.println("Square of " + x + " = " + sqr);

}

}

class Cube extends Thread

{

int x;

Cube(int n)

{

x = n;

```
public void run()
```

```
{
```

```
int cub = x * x * x;
```

```
System.out.println("Cube of " + x + " = " + cub);
```

```
}
```

```
}
```

```
class Number extends Thread
```

```
{
```

```
public void run()
```

```
{
```

```
Random rand = new Random();
```

```
for (int i = 0; i < 8; i++)
```

```
{
```

```
int randomInteger = rand.nextInt(100);
```

```
System.out.println("Random Integer: " + randomInteger);
```

```
if (randomInteger % 2 == 0)
```

```
{
```

```
System.out.println("Even value");
```

```
Square s = new Square(randomInteger);
```

```
s.start();
```

```
}
```

```
else {
```

```
System.out.println("Odd value");
```

```
Cube c = new Cube(randomInteger);
```

```
c.start();
```

```
}
```

```
try {
```

```
Thread.sleep(1000);
```

2]

```
try catch (InterruptedException ex) {
```

```
    System.out.println(ex);
```

```
}
```

```
}
```

```
}
```

```
}
```

```
class main {
```

```
    public static void main (String args[])
```

```
{
```

```
        Number n = new Number();
```

```
        n.start();
```

```
}
```

```
}
```