```
-----Sequential
Gophers – 1
Incinerator -1
Total time – 930
public class SequentialImpl {
  public static void main(String ar[]){
    int pile=50,tot_dur=0,burnedBooks=0,remainingBooks=0,cartCapacity=5,incineratorCapacity=3,loadDur=10,pToIDur=30,iToPDur=30,unloadDur=10,burnDur=20;
    while(pile>0) {
      //load to cart
      pile -= cartCapacity;
      tot_dur += loadDur;
      //move to incinerator
      tot_dur += pToIDur;
      //unload from cart
      tot_dur += unloadDur;
      if (pile <= 0)
        break;
      //move to pile
      tot_dur += iToPDur;
      burnedBooks += incineratorCapacity;
      remainingBooks += cartCapacity-incineratorCapacity;
    remainingBooks+=cartCapacity;
    while(remainingBooks>0){
      burnedBooks+=incineratorCapacity;
      remainingBooks-=incineratorCapacity;
      tot_dur+=burnDur;
    System.out.println("Total duration : "+tot_dur);
```

-----Concurrent

1) Gophers-8 Time required-230 L : Load

M : Move

UL: Unload

MB : Move Back

I1 : Incinerator 1

I2 : Incinerator 2

B:Burn

R : Remain

Gophers	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
G1	L(5,45)	M	M	M	UL	MB	MB	MB	L(5,5)	M	M	M	UL	I1:3-B	2-R	I1:3-B	3	I1:3-	·B	I1 : 3-B		I1:2-B	
						I1:3-B	2-R																
G2		L(5,40)	M	M	M	UL	MB	MB	MB	L(5,0)	M	M	M	UL	I2:3	-B 2-R	I2:3	- B	I2 : 3-E	3	I2 : 3-E	3	
							I2:3-B	2-R															
G3			L(5,35)	M	M	M	UL	I1:3-B	2-R														
G4				L(5,30)	M	M	M	UL	I2 : 3-E	3 2-R													
G5					L(5,25)	M	M	M	UL	I1 : 3-B	2-R												
G6						L(5,20)	M	M	M	UL	I2:3-B	2-R											
G7							L(5,15)	M	M	M	UL	I1:3-B2	2-R										
G8								L(5,10)	M	M	M	UL	I2 : 3-E	3 2-R									

2) Gophers-6 Time required – 260 L - load

M - move

UL - unload

W - wait

B - back

I1 – incinerator 1

I2 – incinerator 2

TE MCMCIACOTE																														
10	10	10	1	10	10	10	10	10	1	10	10	10	10		10	10	10	10	10	10) 10		10	10	10	10	10	10	10	I
L(5,45)	M		В		L(5,35)	M	В]	L(5,25)	M	В	}		L(5,15)	M	В		L(5,5	5) M	I	END								1
W			M		UL	В	M		1	UL	В	N	1		UL	В	M		UL	В		M		UL	END					
G3 W					I1:3-B	·	I1:	2-B		I1:3-B	·	I1:2	2-B		I1:3-B		I1:2-	В	I1	:3-B	·	I1:2-B		I1:3-B		I1:2-	-B	END		
	L(5,40)	M		В		L(5,30)	M		В		L(5,20)	M		В		L(5,10)	M	В		L((5,0) M		END							
W				M		UL	В		M		UL	В		M		UL	В	M		U	L B		M		UL	END				
W							I2 : 3-	В		I2:2-B		I2:3	-В		I2:2-B	·	I2 : 3-E	3	I2:2	-В	I2	: 3-B		I2:2-B		I2:3	-В	I2 : 2	2-B	END
	10 L(5,45) W W	10 10 L(5,45) M W W L(5,40)	10 10 10 L(5,45) M	10 10 10 L(5,45) M B W M W L(5,40) M W	10 10 10 10 L(5,45) M B W M W L(5,40) M B W M	10 10 10 10 10 L(5,45) M B L(5,35) W M UL W L(5,40) M B W M M	10 10 10 10 10 L(5,45) M B L(5,35) M W M UL B W I1:3-B L(5,40) M B L(5,30) W M UL	10 10 10 10 10 10 10 L(5,45) M B L(5,35) M B W M UL B M W I1:3-B L(5,40) M B L(5,30) M W M UL B	10 10 10 10 10 10 10 10 L(5,45) M B L(5,35) M B W M UL B M W I1:3-B I1: L(5,40) M B L(5,30) M W M UL B	10 10 10 10 10 10 10 10 10 L(5,45) M B L(5,35) M B B W UL B M I1:3-B I1:2-B L(5,40) M B L(5,30) M B W W UL B M	10 <	10 <	10 <	10 <	10 10	10 <	10 <	10 10	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$