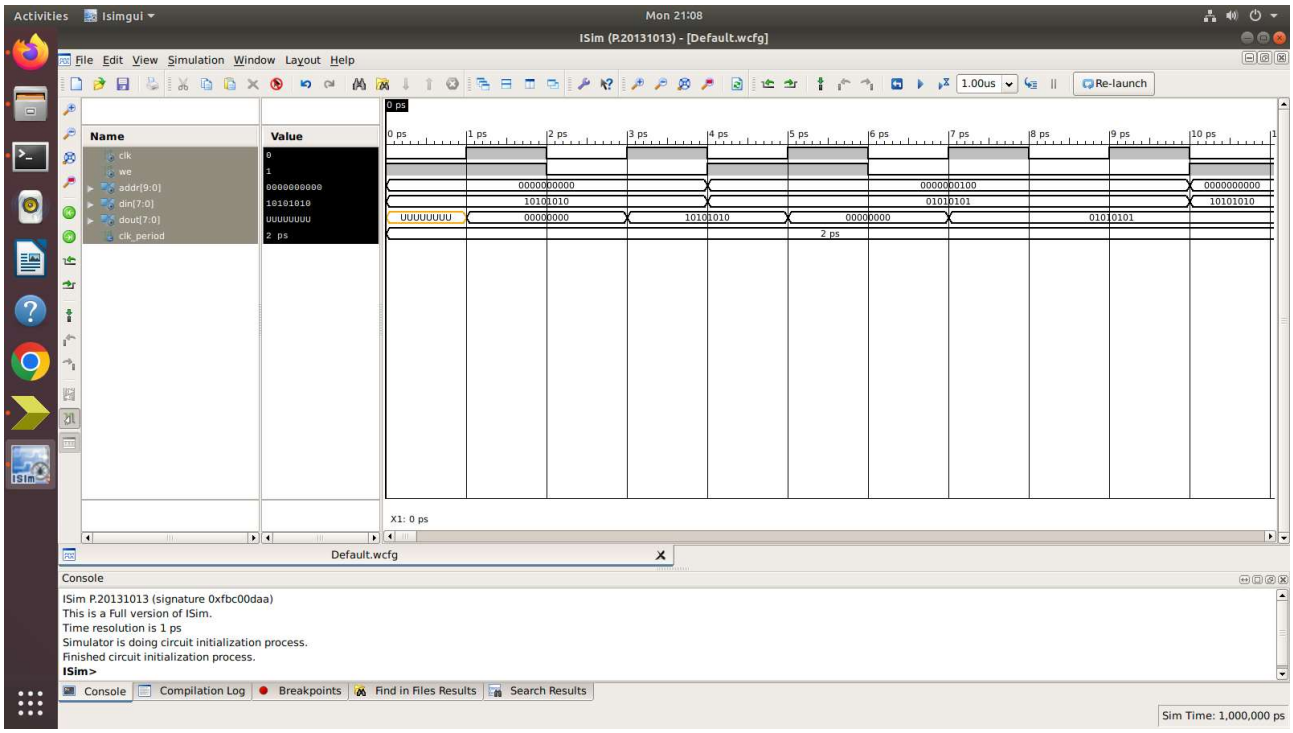
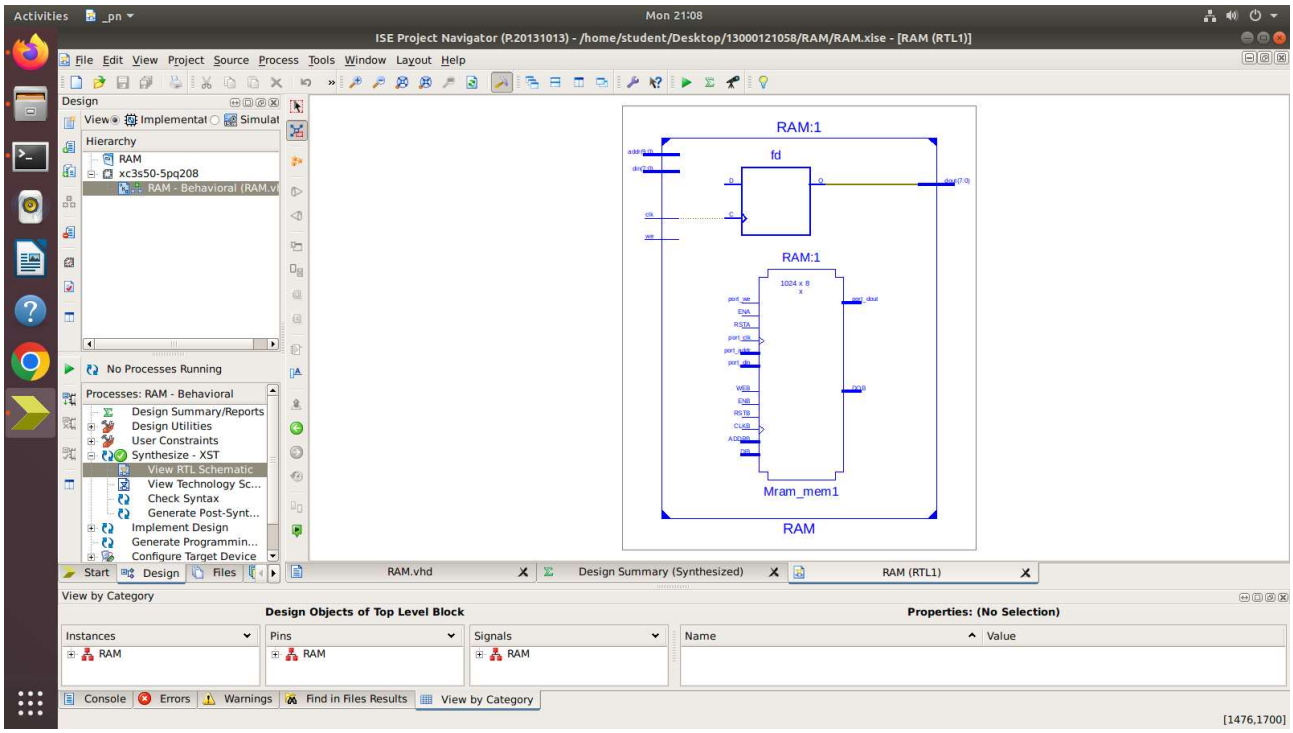
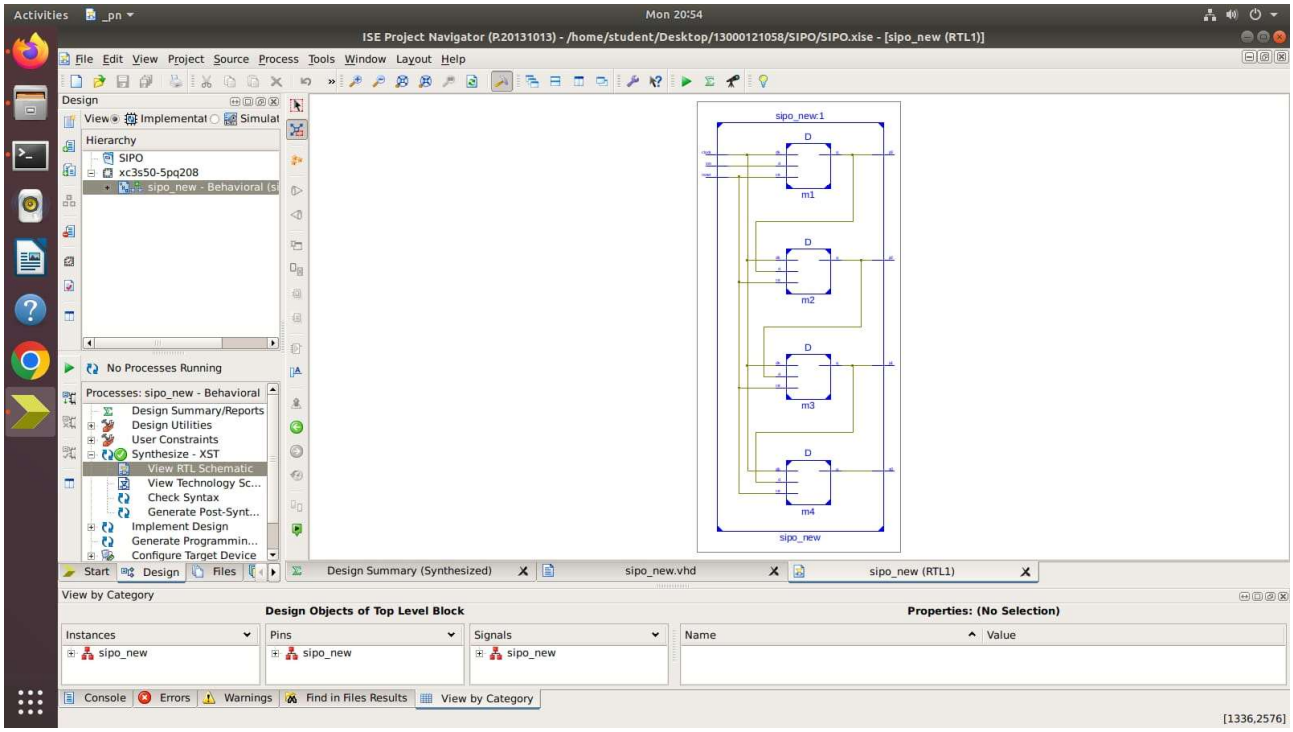
TEST OUTPUT


Activities
Isimgui
Mon 21:08
ISim (P.20131013) - [Default.wcfg]
File Edit View Simulation Window Layout Help
1.00us
Re-launch
Name
Value
clk
we
addr[9:0]
din[7:0]
dout[7:0]
clk_period
0
1
0000000000
10101010
UUUUUUUU
2 ps
0 ps
1 ps
2 ps
3 ps
4 ps
5 ps
6 ps
7 ps
8 ps
9 ps
10 ps
0000000100
01010101
00000000
X1: 0 ps
Default.wcfg
Console
ISim P.20131013 (signature 0xfbc00daa)
This is a Full version of ISim.
Time resolution is 1 ps
Simulator is doing circuit initialization process.
Finished circuit initialization process.
ISim>
Console
Compilation Log
Breakpoints
Find in Files Results
Search Results
Sim Time: 1,000,000 ps

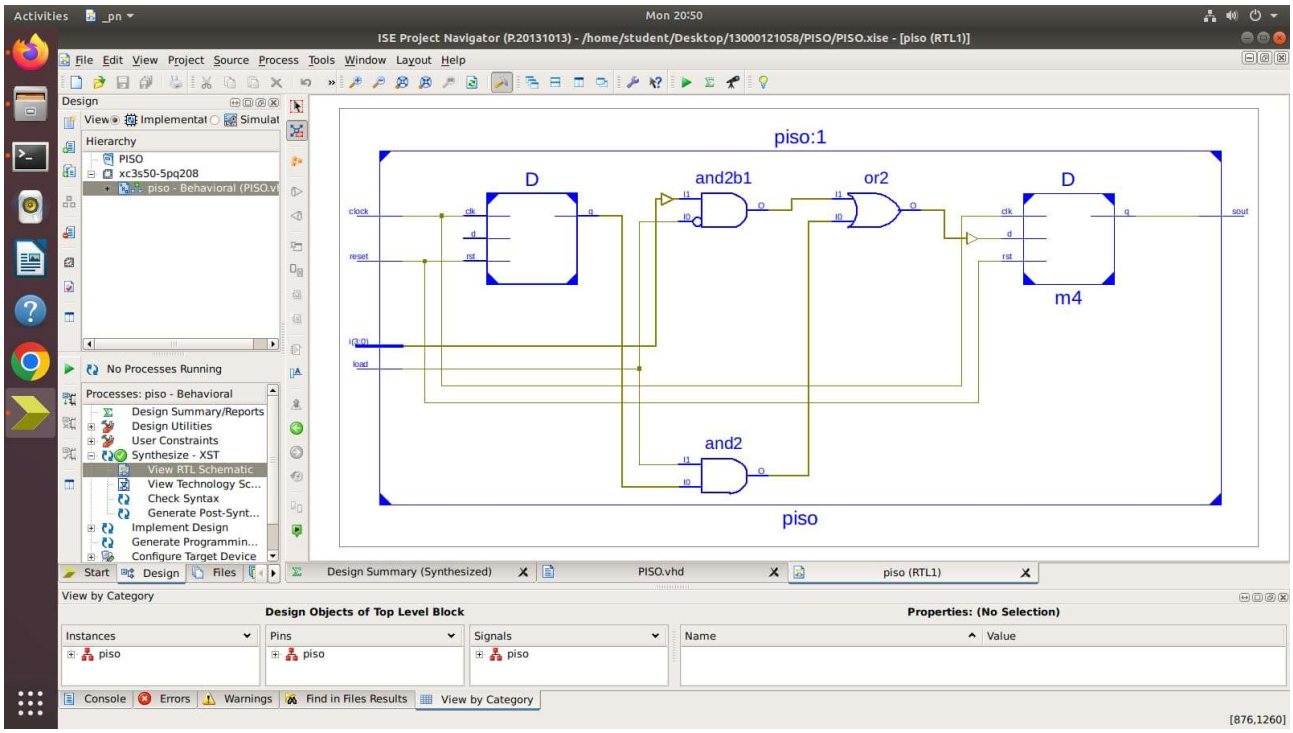
SCHEMATIC OUTPUT



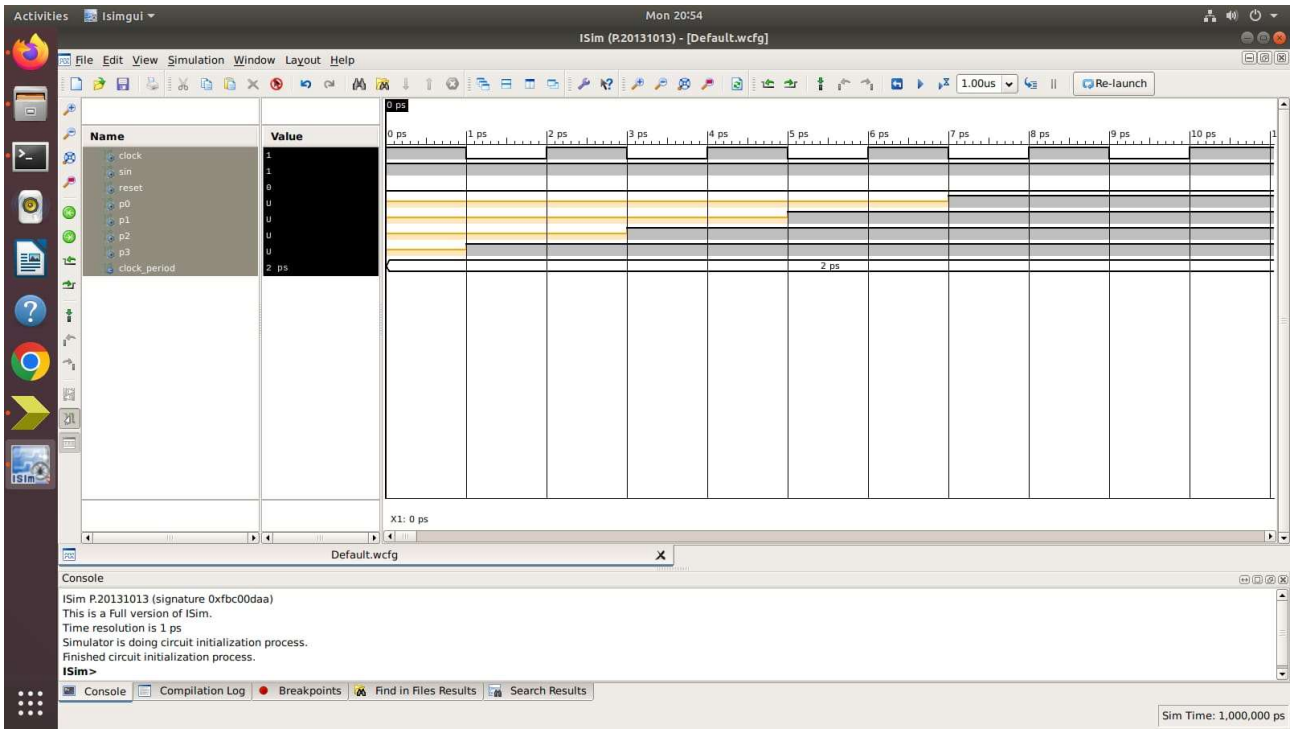
SCHEMATIC OUTPUT



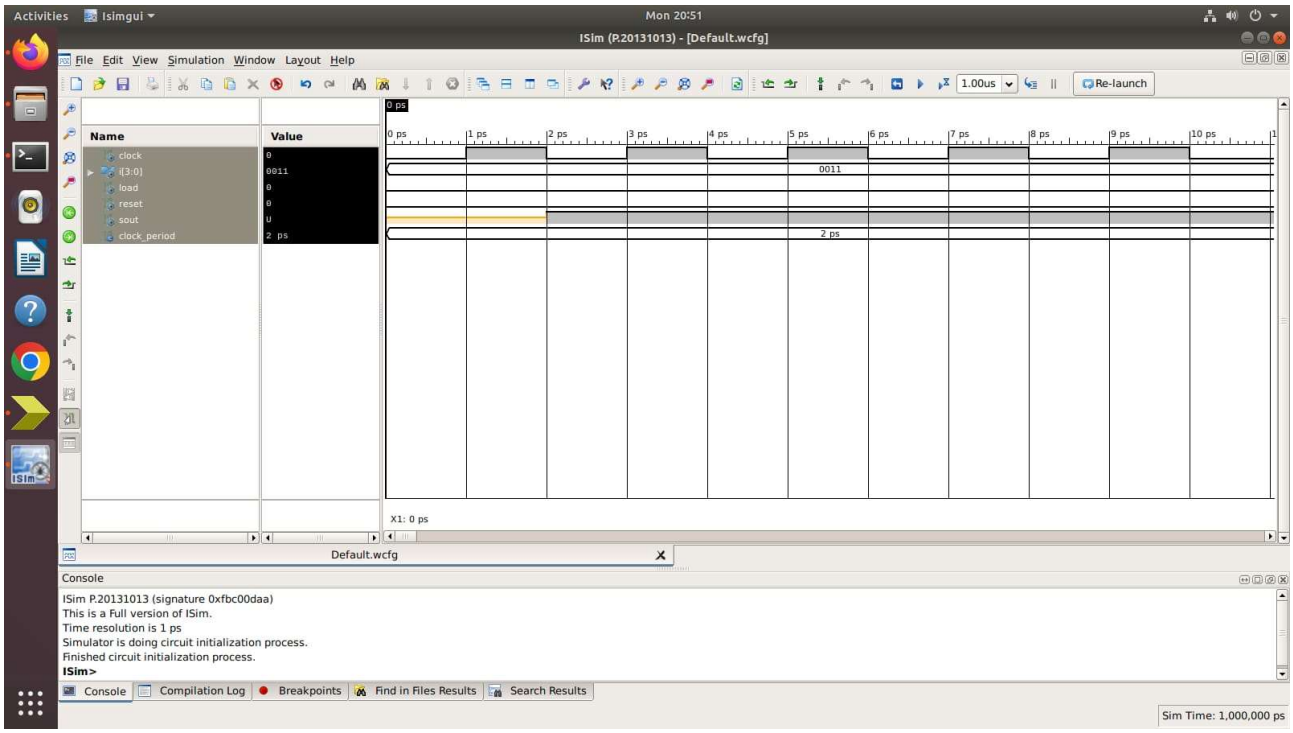
SCHEMATIC OUTPUT



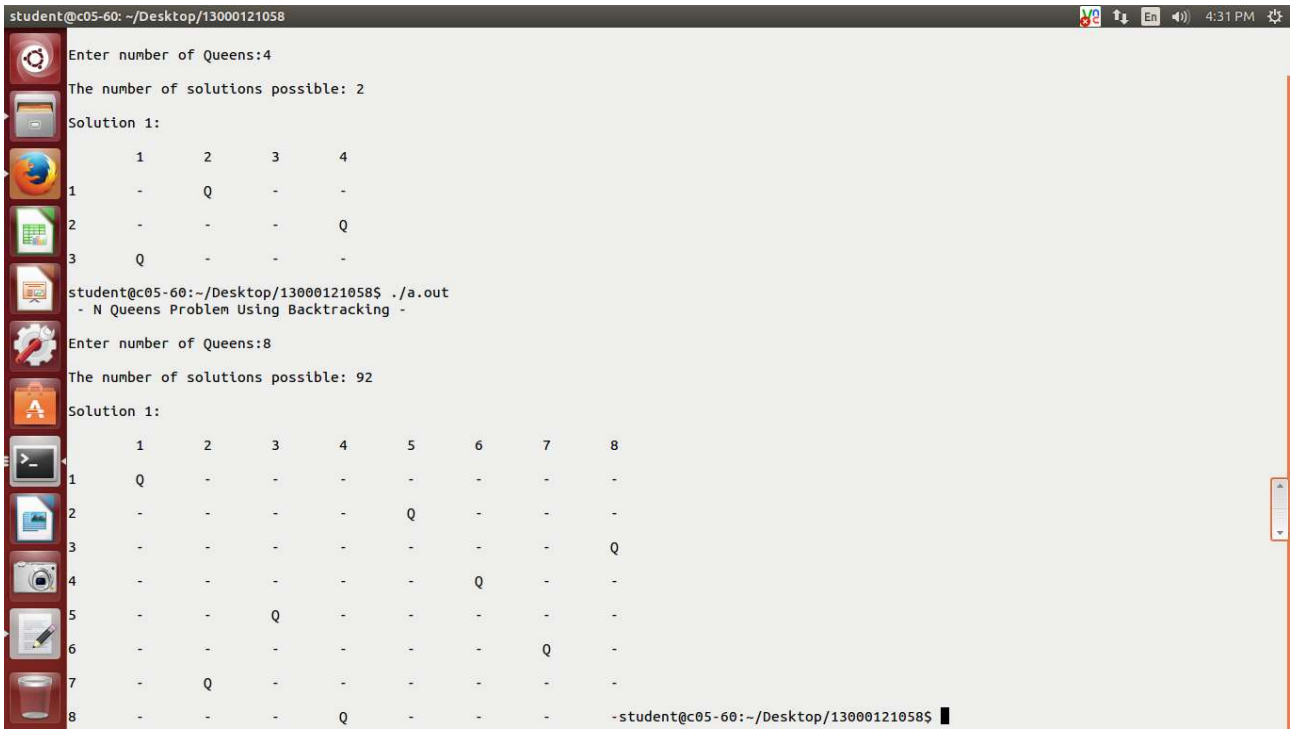
TEST OUTPUT


Activities
Isimgui
Mon 20:54
ISim (P.20131013) - [Default.wcfg]
File Edit View Simulation Window Layout Help
1.00us
Re-launch
Name
Value
clock
sin
reset
p0
p1
p2
p3
clock_period
2 ps
0 ps
1 ps
2 ps
3 ps
4 ps
5 ps
6 ps
7 ps
8 ps
9 ps
10 ps
X1: 0 ps
Default.wcfg
Console
ISim P.20131013 (signature 0xfbc00daa)
This is a Full version of ISim.
Time resolution is 1 ps
Simulator is doing circuit initialization process.
Finished circuit initialization process.
ISim>
Console
Compilation Log
Breakpoints
Find in Files Results
Search Results
Sim Time: 1,000,000 ps

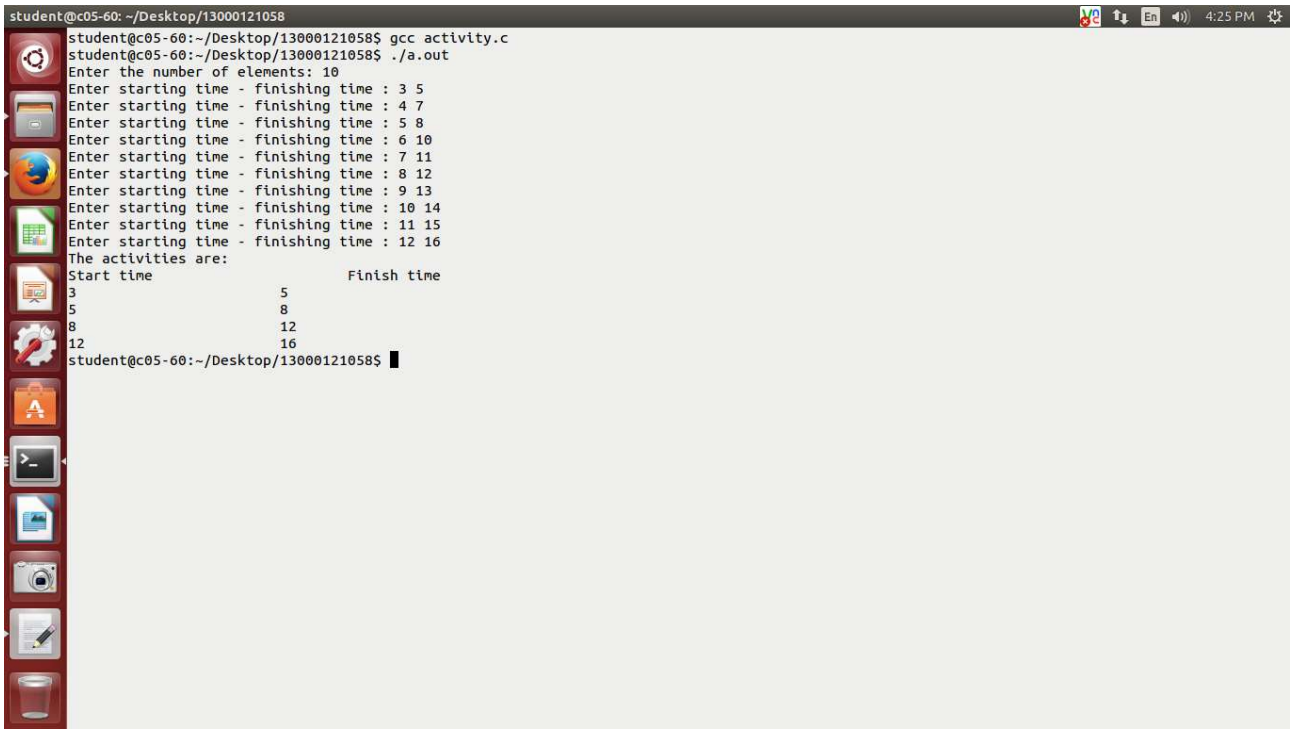
TEST OUTPUT


Activities
Isimgui
Mon 20:51
ISim (P.20131013) - [Default.wcfg]
File Edit View Simulation Window Layout Help
1.00us
Re-launch
Name
Value
clock
i[3:0]
load
reset
sout
clock_period
0
0011
0
0
U
2 ps
0 ps
1 ps
2 ps
3 ps
4 ps
5 ps
6 ps
7 ps
8 ps
9 ps
10 ps
0011
2 ps
X1: 0 ps
Default.wcfg
Console
ISim P.20131013 (signature 0xfbc00daa)
This is a Full version of ISim.
Time resolution is 1 ps
Simulator is doing circuit initialization process.
Finished circuit initialization process.
ISim>
Console
Compilation Log
Breakpoints
Find in Files Results
Search Results
Sim Time: 1,000,000 ps

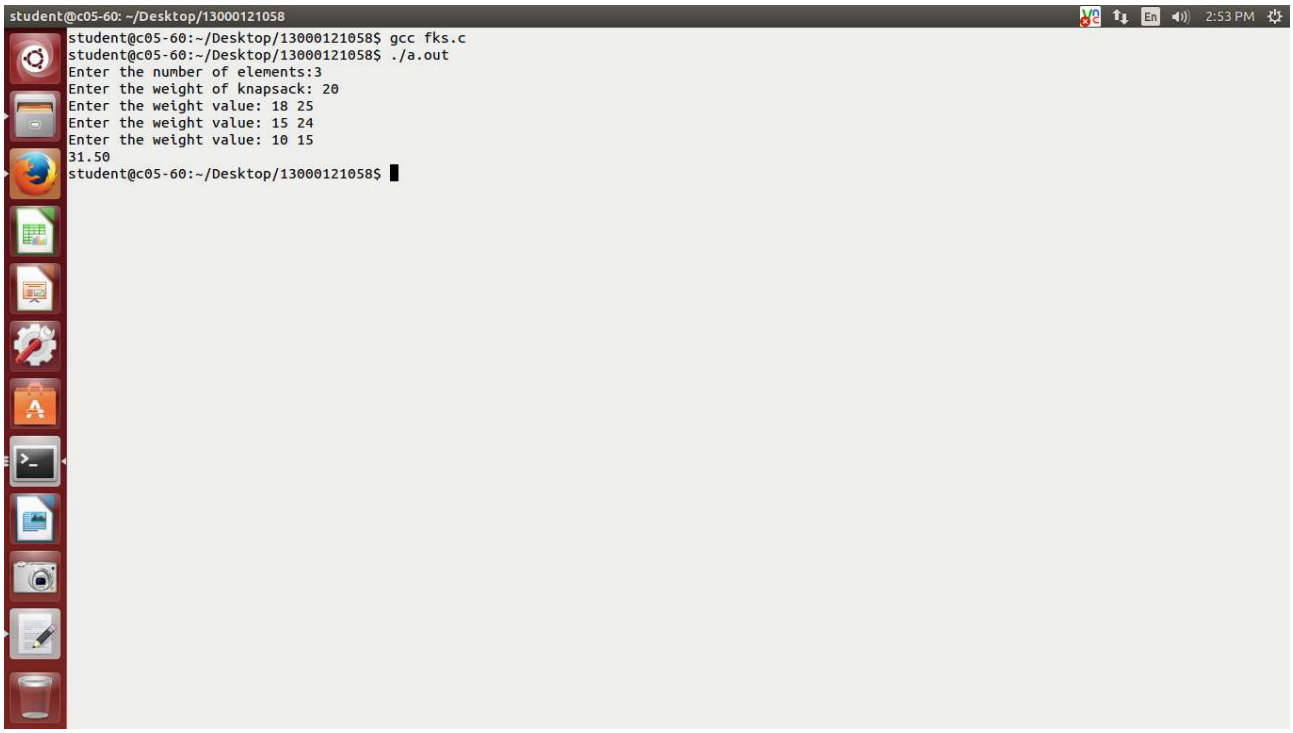
OUTPUT


student@c05-60: ~/Desktop/13000121058
4:31 PM
Enter number of Queens:4
The number of solutions possible: 2
Solution 1:
1 2 3 4
1 - Q - -
2 - - - Q
3 Q - - -
student@c05-60:~/Desktop/13000121058$ ./a.out
- N Queens Problem Using Backtracking -
Enter number of Queens:8
The number of solutions possible: 92
Solution 1:
1 2 3 4 5 6 7 8
1 Q - - - - - - -
2 - - - - Q - - -
3 - - - - - - - Q
4 - - - - - Q - -
5 - - Q - - - - -
6 - - - - - - Q -
7 - Q - - - - - -
8 - - - Q - - - -student@c05-60:~/Desktop/13000121058$

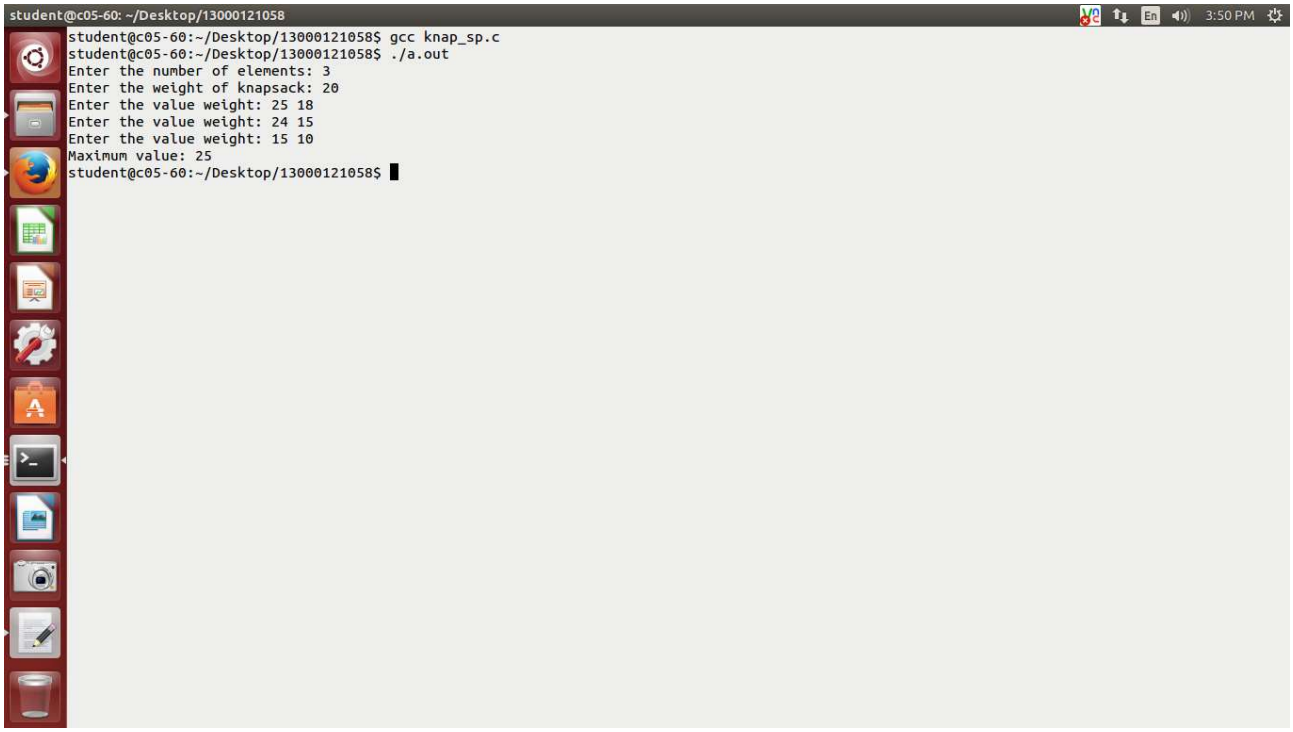
OUTPUT


student@c05-60: ~/Desktop/13000121058
4:25 PM
student@c05-60:~/Desktop/13000121058$ gcc activity.c
student@c05-60:~/Desktop/13000121058$ ./a.out
Enter the number of elements: 10
Enter starting time - finishing time : 3 5
Enter starting time - finishing time : 4 7
Enter starting time - finishing time : 5 8
Enter starting time - finishing time : 6 10
Enter starting time - finishing time : 7 11
Enter starting time - finishing time : 8 12
Enter starting time - finishing time : 9 13
Enter starting time - finishing time : 10 14
Enter starting time - finishing time : 11 15
Enter starting time - finishing time : 12 16
The activities are:
Start time Finish time
3 5
5 8
8 12
12 16
student@c05-60:~/Desktop/13000121058$

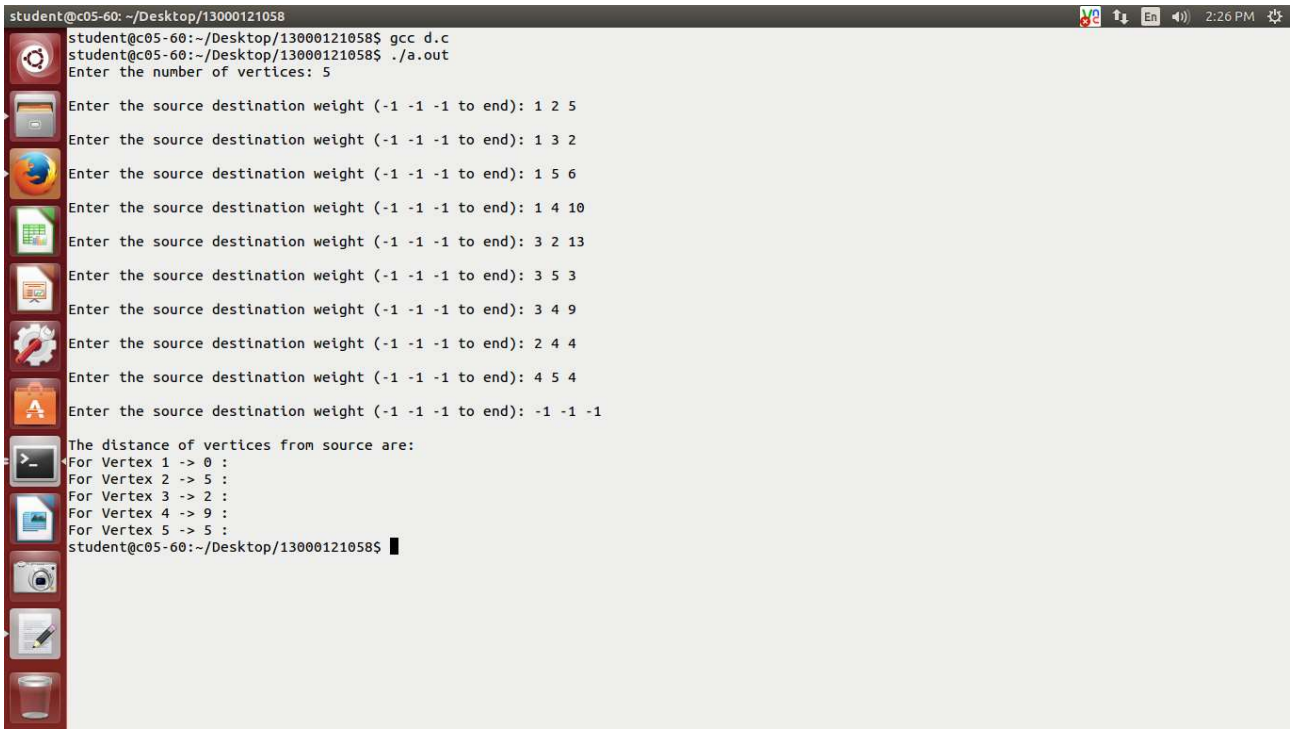
OUTPUT


student@c05-60: ~/Desktop/13000121058
2:53 PM
student@c05-60:~/Desktop/13000121058$ gcc fks.c
student@c05-60:~/Desktop/13000121058$ ./a.out
Enter the number of elements:3
Enter the weight of knapsack: 20
Enter the weight value: 18 25
Enter the weight value: 15 24
Enter the weight value: 10 15
31.50
student@c05-60:~/Desktop/13000121058$

OUTPUT

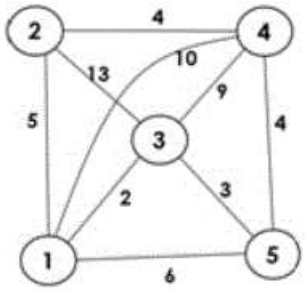

student@c05-60: ~/Desktop/13000121058
3:50 PM
student@c05-60:~/Desktop/13000121058$ gcc knap_sp.c
student@c05-60:~/Desktop/13000121058$ ./a.out
Enter the number of elements: 3
Enter the weight of knapsack: 20
Enter the value weight: 25 18
Enter the value weight: 24 15
Enter the value weight: 15 10
Maximum value: 25
student@c05-60:~/Desktop/13000121058$

OUTPUT

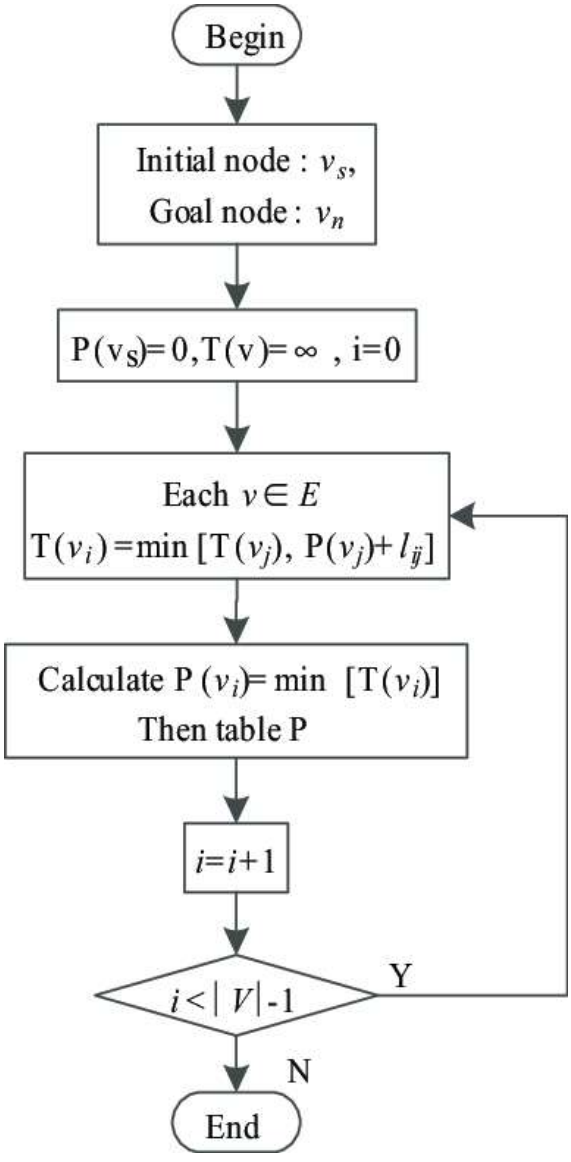

student@c05-60: ~/Desktop/13000121058
2:26 PM
student@c05-60:~/Desktop/13000121058$ gcc d.c
student@c05-60:~/Desktop/13000121058$ ./a.out
Enter the number of vertices: 5
Enter the source destination weight (-1 -1 -1 to end): 1 2 5
Enter the source destination weight (-1 -1 -1 to end): 1 3 2
Enter the source destination weight (-1 -1 -1 to end): 1 5 6
Enter the source destination weight (-1 -1 -1 to end): 1 4 10
Enter the source destination weight (-1 -1 -1 to end): 3 2 13
Enter the source destination weight (-1 -1 -1 to end): 3 5 3
Enter the source destination weight (-1 -1 -1 to end): 3 4 9
Enter the source destination weight (-1 -1 -1 to end): 2 4 4
Enter the source destination weight (-1 -1 -1 to end): 4 5 4
Enter the source destination weight (-1 -1 -1 to end): -1 -1 -1
The distance of vertices from source are:
For Vertex 1 -> 0 :
For Vertex 2 -> 5 :
For Vertex 3 -> 2 :
For Vertex 4 -> 9 :
For Vertex 5 -> 5 :
student@c05-60:~/Desktop/13000121058$

ASSIGNMENT 4.1

Implement Single Source shortest Path for a graph (Dijkstra Algorithm)problem to find out the shortest path from the source vertex ‘1’, using the Dijkstra’s algorithm, using the dynamic programming technique.



FLOWCHART

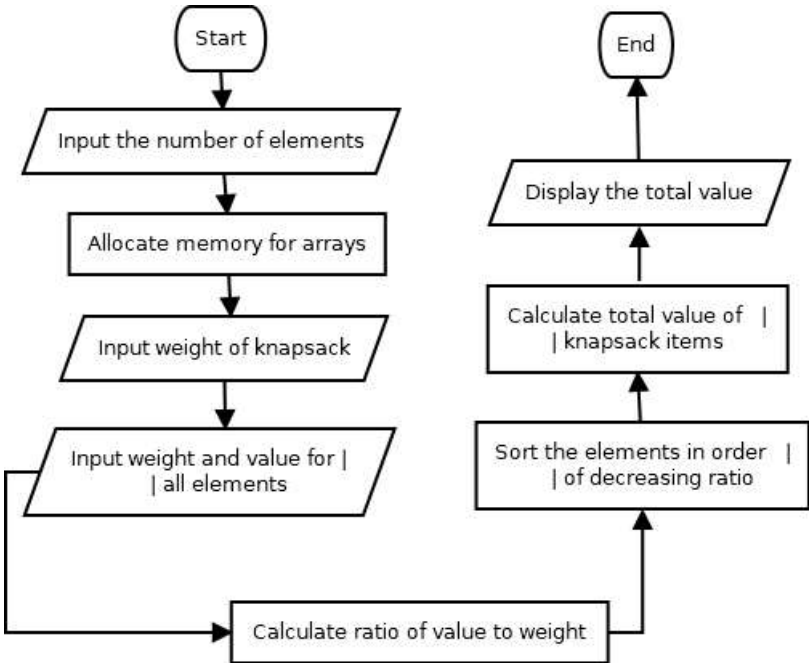


ASSIGNMENT 8.1

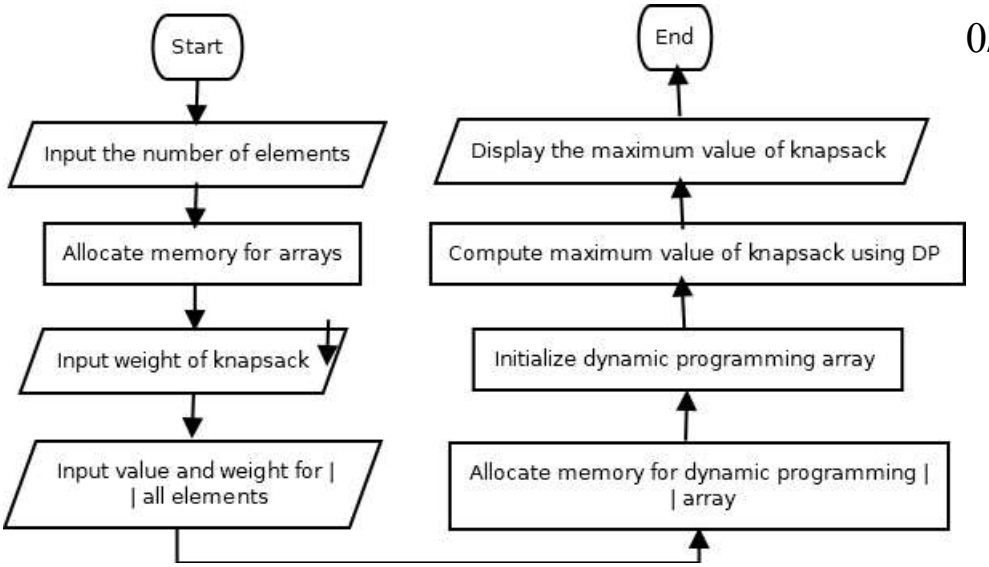
Consider the following knapsack problem where n = 3, W = 20 Kgs, (v1, v2, v3) = (25, 24, 15), and (w1, w2, w3) = (18, 15, 10). WAP to find the optimal solution by fractional knapsack (greedy method) as well as 0 / 1 knapsack (Dynamic programming method).

FLOWCHART

Fractional Knapsack



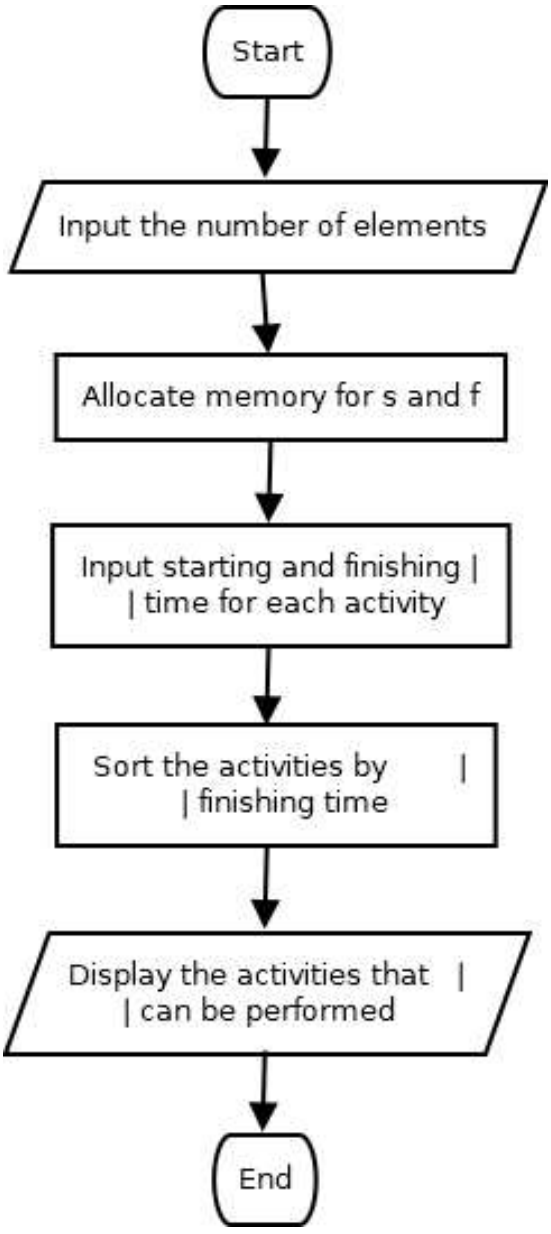
0/1 Knapsack



ASSIGNMENT 8.2

Given a set of '10' jobs with their si and fi, find the optimal sequence of mutually compatible jobs using the greedy method: A = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}, si = {3, 4, 5, 6, 7, 8, 9, 10, 11, 12} and fi = {5, 7, 8, 10, 11, 12, 13, 14, 15, 16}.

FLOWCHART



ASSIGNMENT 10.1

WAP to implement the N-Queen's problem using the method of backtracking.

FLOWCHART