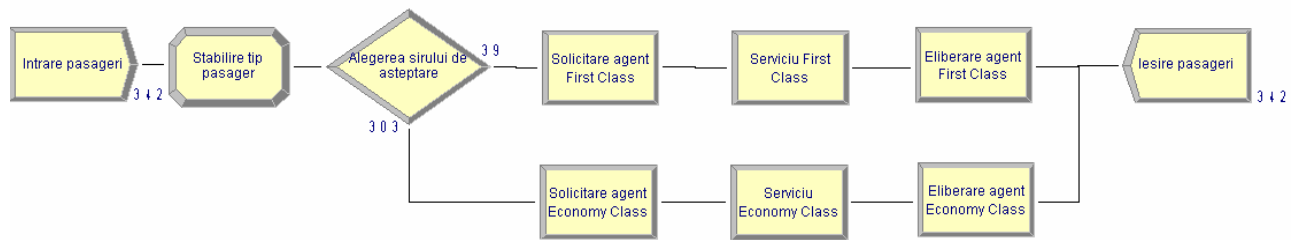


Activitatea 1.



Fișierul Model

```

; Model statements for module: Create 2
11$ CREATE, 1,HoursToBaseTime(8.0),Entity 1:HoursToBaseTime(EXPO(0.033*(2*(TNOW>16)+(TNOW<16)))):NEXT(12$);
12$ ASSIGN: Intrare pasageri.NumberOut=Intrare pasageri.NumberOut + 1:NEXT(0$);

; Model statements for module: Assign 1
0$ ASSIGN: Tip_pasager=DISCRETE(0.2,1,1.0,2);
Entity.Picture=(Tip_pasager==1)*19+(Tip_pasager==2)*8:NEXT(1$);

; Model statements for module: Decide 1
1$ BRANCH, 1:
    If,(Tip_pasager==1).AND.(TNOW<16)
    .AND.((NQ(Sir_economy_class)>3).OR.(NR(Agenti_first_class)==0)), 15$,Yes:
    Else,16$,Yes;

15$ ASSIGN: Alegerea sirului de asteptare.NumberOut True=Alegerea sirului de asteptare.NumberOut
    True + 1:NEXT(2$);
16$ ASSIGN: Alegerea sirului de asteptare.NumberOut False=Alegerea sirului de asteptare.NumberOut
    False + 1:NEXT(7$);

; Model statements for module: Seize 1
2$ QUEUE, Sir_first_class;
SEIZE, 2,Other: Agenti_first_class,1:NEXT(18$);

18$ DELAY: 0.0,,VA:NEXT(4$);

; Model statements for module: Delay 1
4$ DELAY: MinutesToBaseTime(NORM( 7 , 2 )),Other:NEXT(5$);

; Model statements for module: Release 1
5$ RELEASE: Agenti_first_class,1:NEXT(6$);

; Model statements for module: Dispose 1
6$ ASSIGN: Iesire pasageri.NumberOut=Iesire pasageri.NumberOut + 1;
19$ DISPOSE: Yes;

; Model statements for module: Seize 2
7$ QUEUE, Sir_economy_class;
SEIZE, 2,Other: Agenti_economy_class,1:NEXT(21$);

21$ DELAY: 0.0,,VA:NEXT(9$);

; Model statements for module: Delay 2
9$ DELAY: MinutesToBaseTime(NORM( 10 , 4 )),Other:NEXT(10$);
  
```

; Model statements for module: Release 2
10\$ RELEASE: Agenti_economy_class,1:NEXT(6\$);

Fișierul Experiment

ATTRIBUTES: Tip_pasager;

SCHEDULES:

Program agenti EC,TYPE(Capacity),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
 DATA(0,8),DATA(4,16):

Program agenti FC,TYPE(Capacity),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
 DATA(0,8),DATA(1,8):

Intrari,TYPE(Arrival),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
 DATA(0,8),DATA(30,8),DATA(15,8);

QUEUES: Sir_first_class,FIFO,,AUTOSTATS(Yes,,):
 Sir_economy_class,FIFO,,AUTOSTATS(Yes,,);

RESOURCES:

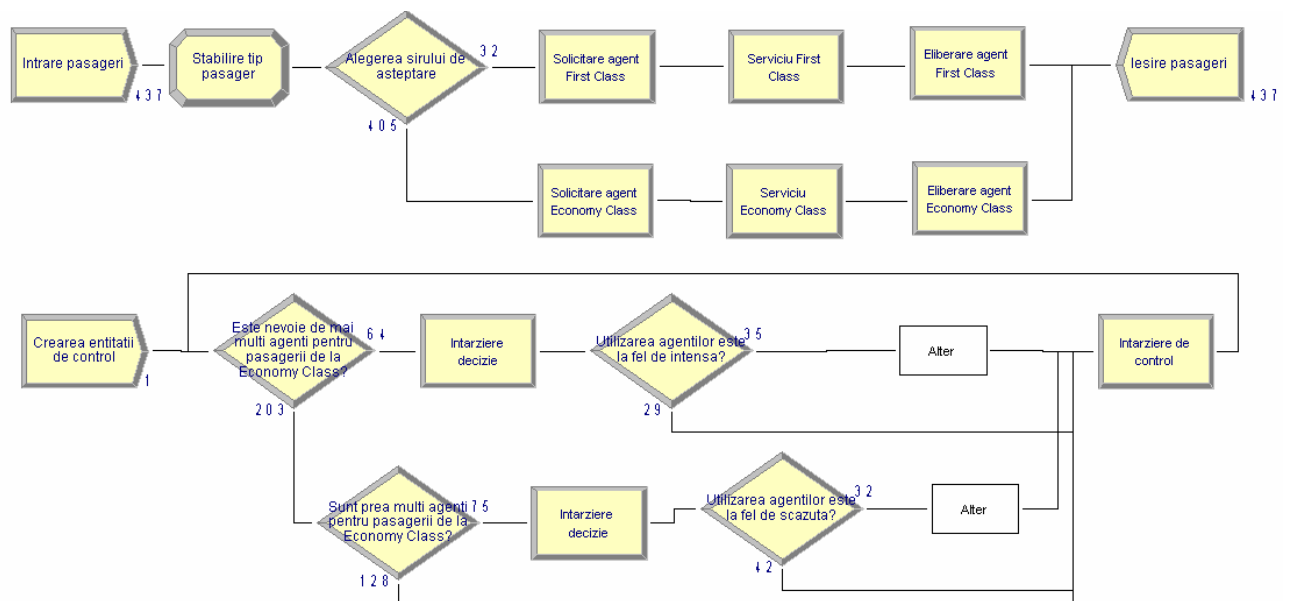
Agenti_first_class,Schedule(Program agenti FC,Wait),,,COST(0.0,0.0,0.0,0.0),
 CATEGORY(Resources),,,AUTOSTATS(Yes,,):

Agenti_economy_class,Schedule(Program agenti EC,Wait),,,COST(0.0,0.0,0.0,0.0),
 CATEGORY(Resources),,,AUTOSTATS(Yes,,);

REPLICATE, 1,,HoursToBaseTime(24),Yes,Yes,,,,24,Hours,No,No,,,Yes;

ENTITIES: Entity 1,Picture.Report,0.0,0.0,0.0,0.0,0.0,0.0,AUTOSTATS(Yes,,);

Activitatea 3.



Fișierul Model

```
; Model statements for module: Create 2
20$ CREATE, 1,NSEXPO(Intrari),Entity 1:NSEXPO(Intrari):NEXT(21$);
21$ ASSIGN: Intrare pasageri.NumberOut=Intrare pasageri.NumberOut + 1:NEXT(0$);

; Model statements for module: Assign 1
0$ ASSIGN: Tip_pasager=DISCRETE(0.2,1,1.0,2):
        Entity.Picture=(Tip_pasager==1)*19+(Tip_pasager==2)*5:NEXT(1$);

; Model statements for module: Decide 1
1$ BRANCH, 1:
        If,(Tip_pasager==1).AND.(TNOW<16)
            .AND.((NQ(Sir_economy_class)>3).OR.(NR(Agenti_first_class)==0)), 24$,Yes:
            Else,25$,Yes;

24$ ASSIGN: Alegerea sirului de asteptare.NumberOut True=Alegerea sirului de asteptare.NumberOut
            True + 1:NEXT(2$);
25$ ASSIGN: Alegerea sirului de asteptare.NumberOut False=Alegerea sirului de asteptare.NumberOut
            False + 1:NEXT(7$);

; Model statements for module: Seize 1
2$ QUEUE, Sir_first_class;
    SEIZE, 2,Other: Agenti_first_class,1:NEXT(27$);

27$ DELAY: 0.0,,VA:NEXT(4$);

; Model statements for module: Delay 1
4$ DELAY: MinutesToBaseTime(NORM( 7 , 2 )),Other:NEXT(5$);

; Model statements for module: Release 1
5$ RELEASE: Agenti_first_class,1:NEXT(6$);

; Model statements for module: Dispose 1
6$ ASSIGN: Iesire pasageri.NumberOut=Iesire pasageri.NumberOut + 1;
28$ DISPOSE: Yes;

; Model statements for module: Seize 2
7$ QUEUE, Sir_economy_class;
    SEIZE, 2,Other: Agenti_economy_class,1:NEXT(30$);

30$ DELAY: 0.0,,VA:NEXT(9$);

; Model statements for module: Delay 2
9$ DELAY: MinutesToBaseTime(NORM( 10 , 4 )),Other:NEXT(10$);

; Model statements for module: Release 2
10$ RELEASE: Agenti_economy_class,1:NEXT(6$);

; Model statements for module: Create 3
31$ CREATE, 1,HoursToBaseTime(8.0),Entity 1:HoursToBaseTime(EXPO(1)),1:NEXT(32$);
32$ ASSIGN: Crearea entitatii de control.NumberOut=Crearea entitatii de control.NumberOut +
            1:NEXT(12$);

; Model statements for module: Decide 2
12$ BRANCH, 1:
        If,RESUTIL(Agenti_economy_class) >.75,35$,Yes:
        Else,36$,Yes;
```

35\$ ASSIGN: Este nevoie de mai multi agenti pentru pasagerii de la Economy Class?.NumberOut True=
Este nevoie de mai multi agenti pentru pasagerii de la Economy Class?.NumberOut True +
1:NEXT(16\$);

36\$ ASSIGN: Este nevoie de mai multi agenti pentru pasagerii de la Economy Class?.NumberOut False=
Este nevoie de mai multi agenti pentru pasagerii de la Economy Class?.NumberOut False +
1:NEXT(13\$);

; Model statements for module: Delay 4
16\$ DELAY: 0.0833333333333333,,Other:NEXT(18\$);

; Model statements for module: Decide 4
18\$ BRANCH, 1:
If,(RESUTIL(Agenti_economy_class) >.75).AND.(MR(Agenti_economy_class)<10),37\$,Yes:
Else,38\$,Yes;

37\$ ASSIGN: Utilizarea agentilor este la fel de intensa?.NumberOut True=
Utilizarea agentilor este la fel de intensa?.NumberOut True + 1:NEXT(14\$);

38\$ ASSIGN: Utilizarea agentilor este la fel de intensa?.NumberOut False=
Utilizarea agentilor este la fel de intensa?.NumberOut False + 1:NEXT(11\$);

14\$ ALTER: Agenti_economy_class,1:NEXT(11\$);

; Model statements for module: Delay 3
11\$ DELAY: 0.0166666666666667,,Other:NEXT(12\$);

; Model statements for module: Decide 3
13\$ BRANCH, 1:
If,RESUTIL(Agenti_economy_class) <.5,39\$,Yes:
Else,40\$,Yes;

39\$ ASSIGN: Sunt prea multi agenti pentru pasagerii de la Economy Class?.NumberOut True=
Sunt prea multi agenti pentru pasagerii de la Economy Class?.NumberOut True +
1:NEXT(17\$);

40\$ ASSIGN: Sunt prea multi agenti pentru pasagerii de la Economy Class?.NumberOut False=
Sunt prea multi agenti pentru pasagerii de la Economy Class?.NumberOut False +
1:NEXT(11\$);

; Model statements for module: Delay 5
17\$ DELAY: 0.0833333333333333,,Other:NEXT(19\$);

; Model statements for module: Decide 5
19\$ BRANCH, 1:
If,(RESUTIL(Agenti_economy_class) <.5).AND.(MR(Agenti_economy_class)>3),41\$,Yes:
Else,42\$,Yes;

41\$ ASSIGN: Utilizarea agentilor este la fel de scazuta?.NumberOut True=
Utilizarea agentilor este la fel de scazuta?.NumberOut True + 1:NEXT(15\$);

42\$ ASSIGN: Utilizarea agentilor este la fel de scazuta?.NumberOut False=
Utilizarea agentilor este la fel de scazuta?.NumberOut False + 1:NEXT(11\$);

15\$ ALTER: Agenti_economy_class,-1:NEXT(11\$);

Fișierul Experiment

ATTRIBUTES: Tip_pasager;

SCHEDULES:

Program agenti EC,TYPE(Capacity),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
DATA(0,8),DATA(5,8),DATA(4,7),DATA(3,1):

```

Program agenti FC,TYPE(Capacity),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
    DATA(0,8),DATA(1,8):
Intrari,TYPE(Arrival),FORMAT(Duration),FACTOR(1.0),UNITS(hours),
    DATA(0,8),DATA(40,1),DATA(37,1),DATA(27,1),DATA(26,1),
    DATA(36,1),DATA(40,1),DATA(36,1),DATA(30,1),DATA(15,1),DATA(30,1),DATA(36,1),
    DATA(29,1),DATA(15,1),DATA(7,1),DATA(3,1), DATA(1,1);

QUEUES:    Sir_first_class,FIFO,,AUTOSTATS(Yes,,):
           Sir_economy_class,FIFO,,AUTOSTATS(Yes,,);

RESOURCES:
    Agenti_first_class,Schedule(Program agenti FC,Wait),,,COST(0.0,0.0,0.0,0.0),CATEGORY(Resources)
    ,,AUTOSTATS(Yes,,):
    Agenti_economy_class,Schedule(Program agenti EC,Wait),,,COST(0.0,0.0,0.0,0.0),
    CATEGORY(Resources),,AUTOSTATS(Yes,,);

REPLICATE,  1,,HoursToBaseTime(24),Yes,Yes,,,,24,Hours,No,No,,,Yes;

```