

```
clear;close all; clc ; rng('default');
% Entities: Customer
% Resources:
%           1- Clerk (Server: can have a queue)
%           2- Space (does not have a queue)
% Processes:
%           1- Buying a tie
for c = 1:2 % loop for each configuration
    if c == 1
        ServerAvailTimeArray = [0,0] ;
        SystemSpaceAvailTimeArray = [0,0,0];
    else
        ServerAvailTimeArray = [0,0,0,0,0,0] ;
        SystemSpaceAvailTimeArray = ...
            [0,0,0,0,0,0,0,0,0,0,0,0,0,0,0];
    end % end if
    max_customers = 10000;
    Sales = zeros(1,max_customers);
    W_Cost = zeros(1,max_customers);
    for i = 1 : max_customers % i is customer #
        IAT = normrnd(1.5,0.15); % Inter-Arrival Time
        if i >1
            AT(i) = IAT + AT(i-1); % Arrival Time of i
        else
            AT(1) = IAT; % Arrival Time of 1st Customer
        end % end if

        if AT(i) > 10*60
            break % break from the inner loop
            % control goes to the outer loop
        end % end if

        [Start_Entrance(i), Space_N] = ...
            Sieze(AT(i),SystemSpaceAvailTimeArray);
        if AT(i) < Start_Entrance(i)
            continue
            % continue skips remaining statements in the inner loop
            % go directly to the next customer in the inner loop
            % Customer i balked
        end % end if
    end
end
```

```
Sales(i)=22;
[Start_Service(i), Srv_N] = ...
    Sieze(AT(i),ServerAvailTimeArray);
W(i) = Start_Service(i)-AT(i); % waiting time for i
W_Cost(i) = W(i)*(10/60);
Service_Time = normrnd(6,1);
Completion(i) = Start_Service(i)+Service_Time;
ServerAvailTimeArray = ...
    ReleaseRes(ServerAvailTimeArray,Srv_N,Completion(i));
SystemSpaceAvailTimeArray = ...
    ReleaseRes(SystemSpaceAvailTimeArray,Space_N,Completion(i));
end % end for 'i'
Profit(c) = sum(Sales)-sum(W_Cost);
if c == 1
    Profit(c) = Profit(c) - 200-(20*3*10);
else
    Profit(c) = Profit(c) - 2000-(20*6*10);
end % end if
end % end for 'c'
if Profit(1) > Profit(2)
    fprintf('use the first configuration');
else
    fprintf('use the second configuration');
end % end if
```