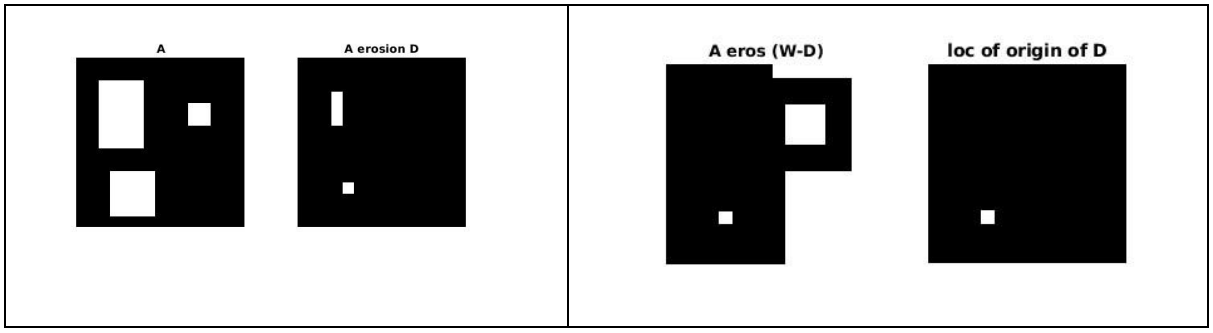
Example for Hit-or-Miss Trsnsformation:




```
A=[0 0 0 0 0 0 0 0 0 0 0 0 0 0 0;
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0;
0 0 1 1 1 1 0 0 0 0 0 0 0 0 0;
0 0 1 1 1 1 0 0 0 0 0 0 0 0 0;
0 0 1 1 1 1 0 0 0 0 1 1 0 0 0;% structure C E
0 0 1 1 1 1 0 0 0 0 1 1 0 0 0;
0 0 1 1 1 1 0 0 0 0 0 0 0 0 0;
0 0 1 1 1 1 0 0 0 0 0 0 0 0 0;
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0;
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0;
0 0 0 1 1 1 1 0 0 0 0 0 0 0 0;
0 0 0 1 1 1 1 0 0 0 0 0 0 0 0;
0 0 0 1 1 1 1 0 0 0 0 0 0 0 0; % D-structure in image 4 X 4 size
0 0 0 1 1 1 1 0 0 0 0 0 0 0 0;
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
];
```

```
D=[ 1 1 1 1 ;
1 1 1 1 ;
    1 1 1 1  ;
    1 1 1 1  ];
```

```
AC = 1- A;   % complement
    [rd, cd]=size(D);
WminusD=zeros(rd+2,cd+2);
for i=2:rd+1
    for j=2:cd+1
        WminusD(i,j)=D(i-1,j-1);
    end
end
WminusD = 1- WminusD;
B2 = 1-D;
A1 = myerosion(A,D); % A erosion D
```

```
A2 = myerosion(AC,WminusD); % AC erosion D
```

```
a = A1 & A2;  % intersection of A1 and A2



figure,
subplot(1,2,1)
imshow(A);
title("A")
subplot(1,2,2)
imshow(A1);
title("A erosion D");
figure,
subplot(1,2,1)
imshow(A2);
title("A eros (W-D)");
subplot(1,2,2)
imshow(a);
title("loc of origin of D")


% a = MHT(A,D);    % we can also use my defined MHT function(present in github accout) to
                     get origin of D
% figure,
% imshow(a)
```