

# DC AHP-8

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Section:'B'

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## CODE:

```
clc;
clear all;
close all;
A=[4,-2;3,1];
[m,n]=size(A);
Q=zeros(m,n);
R=zeros(n,n);
for j=1:n
    v=A(:,j);
    for i=1:j-1
        R(i,j)=Q(:,i)'*A(:,j);
        v=v-R(i,j)*Q(:,i);
    end
    R(j,j)=norm(v);
    Q(:,j)=v/R(j,j);
end
[Q2,R2]=qr(A); %inbuilt
disp('R:');
disp(R);
disp('Q:');
disp(Q);
disp("With inbuilt function:");
disp('R:');
disp(R2);
disp('Q:');
disp(Q2);
```

## OUTPUT:

Without inbuilt function:

```
R:
     5     -1
     0      2

Q:
    0.8000   -0.6000
    0.6000    0.8000
```

With inbuilt function:

```
R:
    -5      1
     0      2

Q:
   -0.8000   -0.6000
   -0.6000    0.8000
```