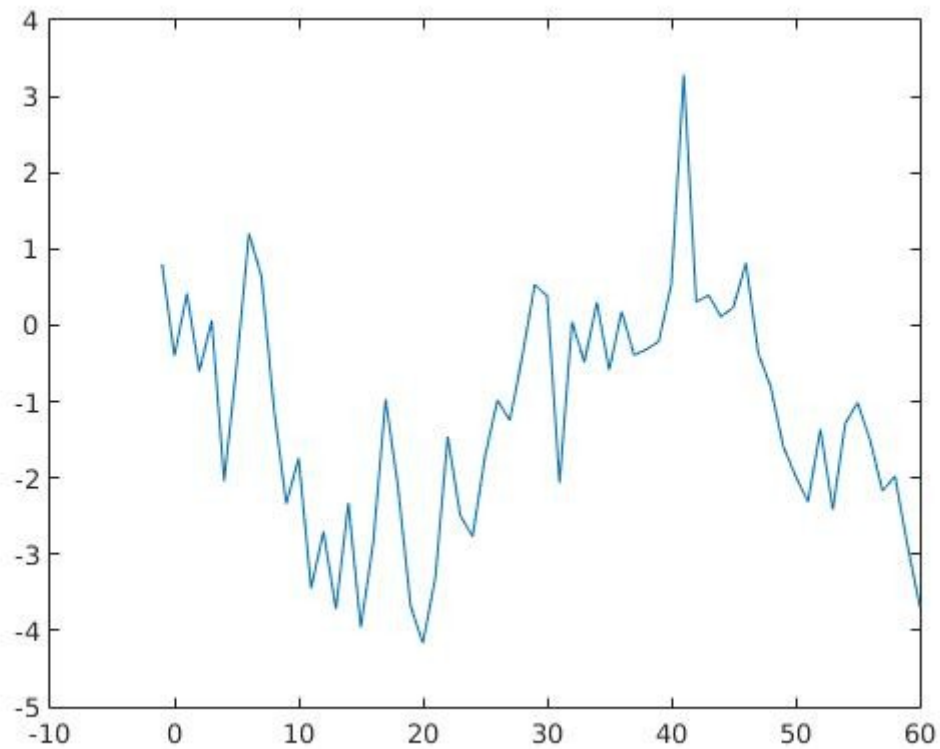


3,



And then I used those points to simulate  $\phi_1$  and  $\phi_2$ .

```
>> SimAR(60)  
ans =
```

```
0.6544  
0.2305
```

Even I get the solution, I have to check whether the code is right or wrong.

```
>> SimAR(100000)  
ans =
```

```
0.5936  
0.3057
```

The solution is very close to our 0.6 and 0.3.  
So that is right.

Here is the code:

```
function dd=SimAR(n)
e=normrnd(0,1,[1,n]);
a=[0.8,-0.4];
y=zeros(1,n);
y=[a,y];
for i=1:n
    y(i+2)=0.6*y(i+1)+0.3*y(i)+e(i);
end
x=-1:n;
plot(x,y);
A=zeros(2,2);
b=zeros(2,1);
for i=1:n
    A(1,1)=A(1,1)+y(i+1)^2;
    A(1,2)=A(1,2)+y(i+1)*y(i);
    A(2,2)=A(2,2)+y(i)^2;
    b(1,1)=b(1,1)+y(i+2)*y(i+1);
    b(2,1)=b(2,1)+y(i)*y(i+2);
end
A(2,1)=A(1,2);
dd=inv(A)*b;
```