```
t = 0:0.1:50;

%R = 0 欧姆时

r = 0;

o1 = ((-1i*r+sqrt(4-r^2))/2);

o2 = ((-1i*r-sqrt(4-r^2))/2);

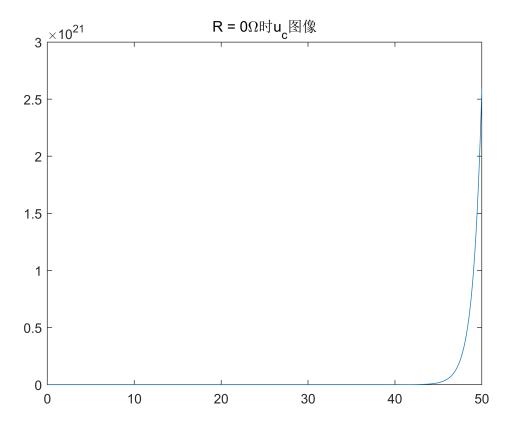
A1 = o2/(o2-o1);

A2 = o1/(o1-o2);

Uc = @(t)(A1*exp(o1*t)+A2*exp(o2*t));

plot(t,Uc(t))

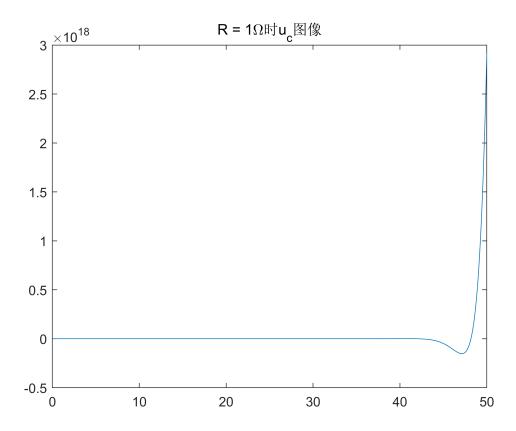
title('R = 0\Omega时u_c 图像')
```



```
%R = 1 欧姆时
r = 1;
o1 = ((-1i*r+sqrt(4-r^2))/2);
o2 = ((-1i*r-sqrt(4-r^2))/2);
A1 = o2/(o2-o1);
A2 = o1/(o1-o2);
Uc = @(t)(A1*exp(o1*t)+A2*exp(o2*t));
plot(t,Uc(t))
```

警告: 复数 X 和/或 Y 参数的虚部已忽略。

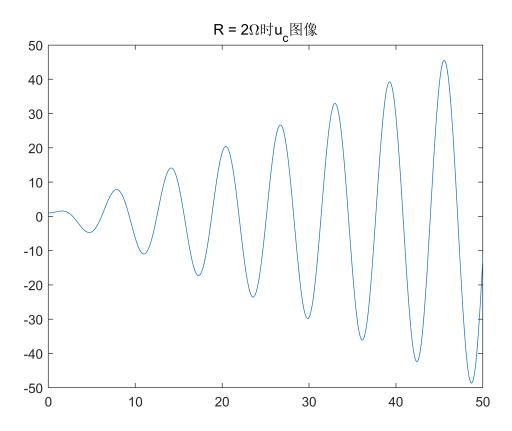
```
title('R = 1\Omega时u_c图像')
```



```
%R = 2 欧姆时
o = -1i;
Uc = (1+o.*t).*exp(-1*o.*t);
plot(t,Uc)
```

警告: 复数 X 和/或 Y 参数的虚部已忽略。

```
title('R = 2\Omega时u_c图像')
```



```
%R = 4欧姆时
r = 4;
o1 = ((-1i*r+sqrt(4-r^2))/2);
o2 = ((-1i*r-sqrt(4-r^2))/2);
A1 = o2/(o2-o1);
A2 = o1/(o1-o2);
Uc = @(t)(A1*exp(o1*t)+A2*exp(o2*t));
plot(t,Uc(t))
```

警告: 复数 X 和/或 Y 参数的虚部已忽略。

```
title('R = 4\Omega时u_c图像')
```

