1)

```
clc;
clear all;
close all;

t=-2:0.1:2;
x=exp(2*t);
subplot(2,2,1);

plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous growing exp signal 045/BCT/2075')

n=-2:1:2;
y=exp(2*n)
subplot(2,2,2);
stem(n,y);

xlabel('');
ylabel('exp(n)');
title('Discrete growing exp signal 045/BCT/2075')

t=-2:0.1:2;
x=exp(-2*t);
```

```
subplot(2,2,3);


plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous decaying exp signal 045/BCT/2075')

n=-2:1:2;
y=exp(-2*n)
subplot(2,2,4);
stem(n,y);

xlabel('');
ylabel('exp(n)');
title('Discrete decaying exp signal 045/BCT/2075')
```

2)

```
lc;
clear all;
close all;

t=-5:0.1:5;
a=2i;
x=real(exp(a*t));
subplot(2,2,1);
```

```
plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous real exp signal 045/BCT/2075')

n=-5:1:5;
a=2i;
y=exp(a*n)
subplot(2,2,2);
stem(n,y);

xlabel('');
ylabel('exp(n)');
title('Discrete real exp signal 045/BCT/2075')

t=-5:0.1:5;
a=2i;
x=imag(exp(a*t));
subplot(2,2,3);

plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous imaginary exp signal 045/BCT/2075')
```

```
n=-5:1:5;

a=2i;

y=imag(exp(a*n))

subplot(2,2,4);

stem(n,y);


xlabel('');

ylabel('exp(n)');

title('Discrete imaginary exp signal 045/BCT/2075')


3&4)

clc;

clear all;

close all;


t=-10:0.1:10;

a= 1+4i;

x=real(exp(a*t));

subplot(4,2,1);


plot(t,x);

xlabel('time(t)');

ylabel('exp(t)');

title('Continous real a = r + jw exp signal 045/BCT/2075')
```

```
n=-10:0.1:10;
a=1+4i;
y=real(exp(a*n))
subplot(4,2,2);
stem(n,y);

xlabel('');
ylabel('exp(n)');
title('Discrete real a = r + jw exp signal 045/BCT/2075')

t=-10:0.1:10;
a=-1+4i;
x=real(exp(a*t));
subplot(4,2,3);

plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous  real a = -r + jw exp signal 045/BCT/2075')

n=-10:0.1:10;
a=-1+4i;
y=real(exp(a*n));
subplot(4,2,4);
```

```
stem(n,y);


xlabel('');
ylabel('exp(n)');
title('Discrete real a = -r + jw exp signal 045/BCT/2075')




t=-10:0.1:10;
a= 1+4i;
x=imag(exp(a*t));
subplot(4,2,5);

plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous img a = r + jw exp signal 045/BCT/2075')

n=-10:0.1:10;
a=1+4i;
y=imag(exp(a*n))
subplot(4,2,6);
stem(n,y);

xlabel('');
```

```
ylabel('exp(n)');
title('Discrete img a = r + jw exp signal 045/BCT/2075')

t=-10:0.1:10;
a=-1+4i;
x=imag(exp(a*t));
subplot(4,2,7);

plot(t,x);
xlabel('time(t)');
ylabel('exp(t)');
title('Continous img a = -r + jw exp signal 045/BCT/2075')

n=-10:0.1:10;
a=-1+4i;
y=imag(exp(a*n));
subplot(4,2,8);
stem(n,y);

xlabel('');
ylabel('exp(n)');
title('Discrete img a = -r + jw exp signal 045/BCT/2075')
```