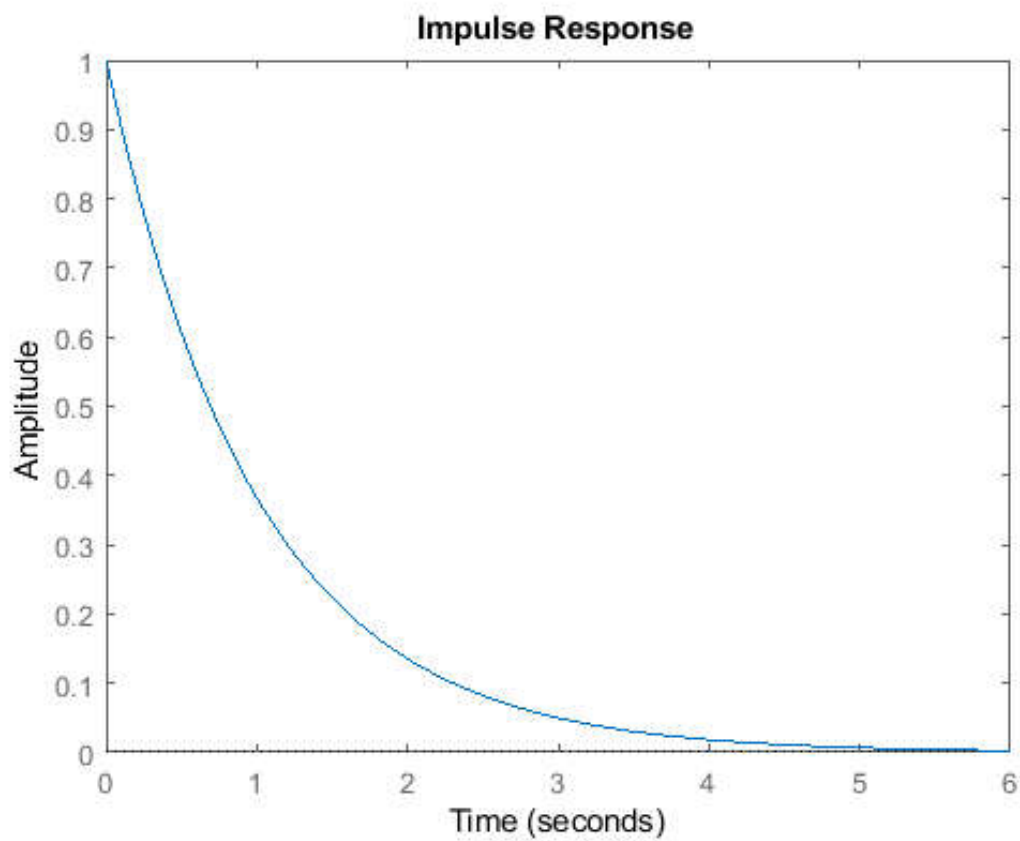


Verifying impulse response of $1/(1+s)$

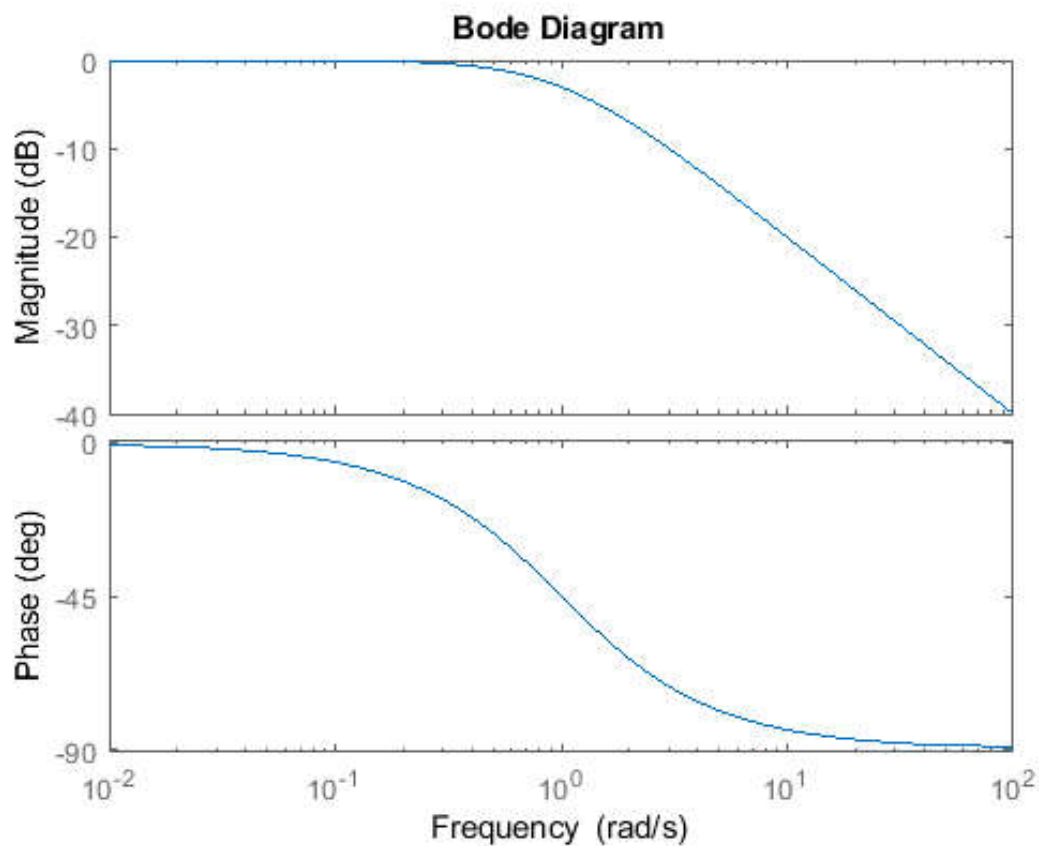
- impulse response of $tf=1/(1+s)$

```
s=tf('s');  
stf=1/(1+s);  
figure(1)  
impz(stf)  
hold
```



Current plot held

```
figure(2)  
bode(stf)  
hold
```



Current plot held

- $ztf = c2d(1/(1+s), 0.01)$

```
Ts=.01;
ztf=c2d(1/(1+s), Ts,'tustin')
```

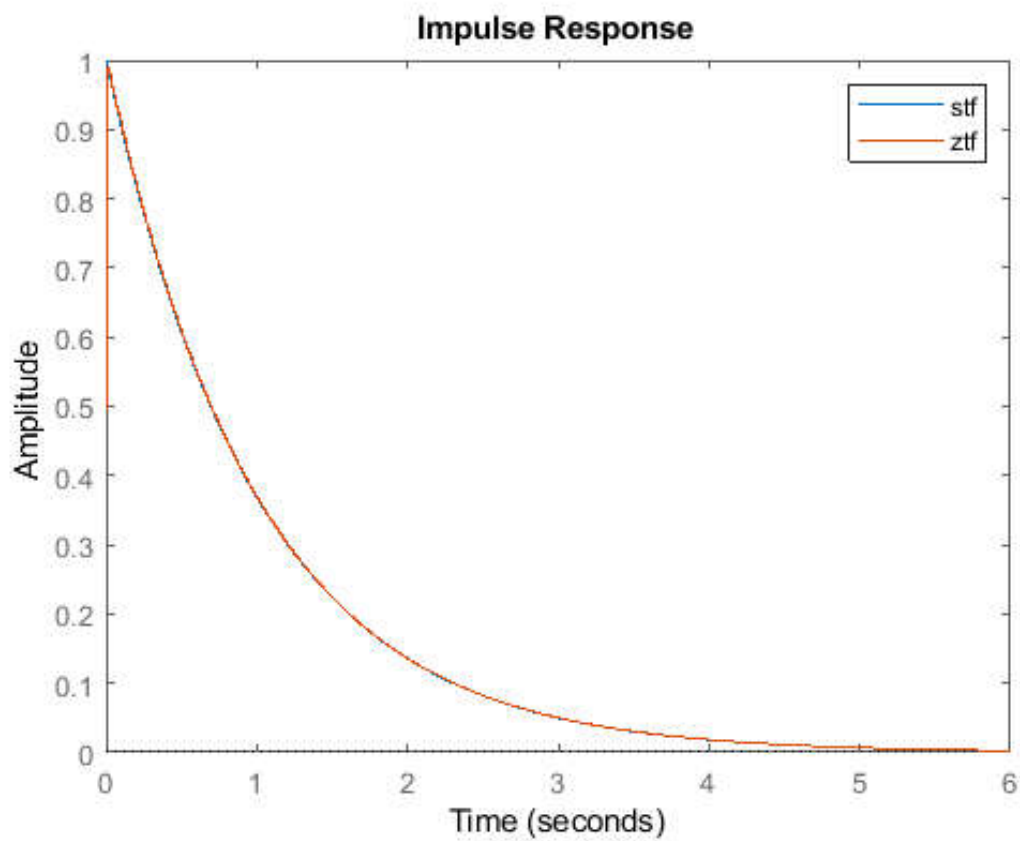
ztf =

$$\frac{0.004975 z + 0.004975}{z - 0.99}$$

Sample time: 0.01 seconds
Discrete-time transfer function.

- impulse response of ztf

```
figure(1)
impz(ztf,[0:Ts:6])
legend
```



```
figure(2)  
bode(ztf)  
legend
```

