

```
N = 15;  
n = 0:N;  
A = 1;  
dt = 0.01;  
t = (-2:dt:2)';  
T = 1;
```

```
an = -(4 * (-1).^n * abs(A)) ./ (pi * (4 * n.^2 - 1))
```

```
an = 1x16  
    1.2732    0.4244   -0.0849    0.0364   -0.0202    0.0129   -0.0089    0.0065 ...
```

```
wn = 2 * n * pi / T
```

```
wn = 1x16  
     0     6.2832    12.5664    18.8496    25.1327    31.4159    37.6991    43.9823 ...
```

```
y = an(1) / 2 + sum(an(2:end) .* cos(wn(2:end) .* t), 2)
```

```
y = 401x1  
    1.0007  
    0.9999  
    0.9978  
    0.9949  
    0.9916  
    0.9878  
    0.9829  
    0.9765  
    0.9686  
    0.9597  
     ...  
     ...  
     ...
```

```
plot(t, y)
```

