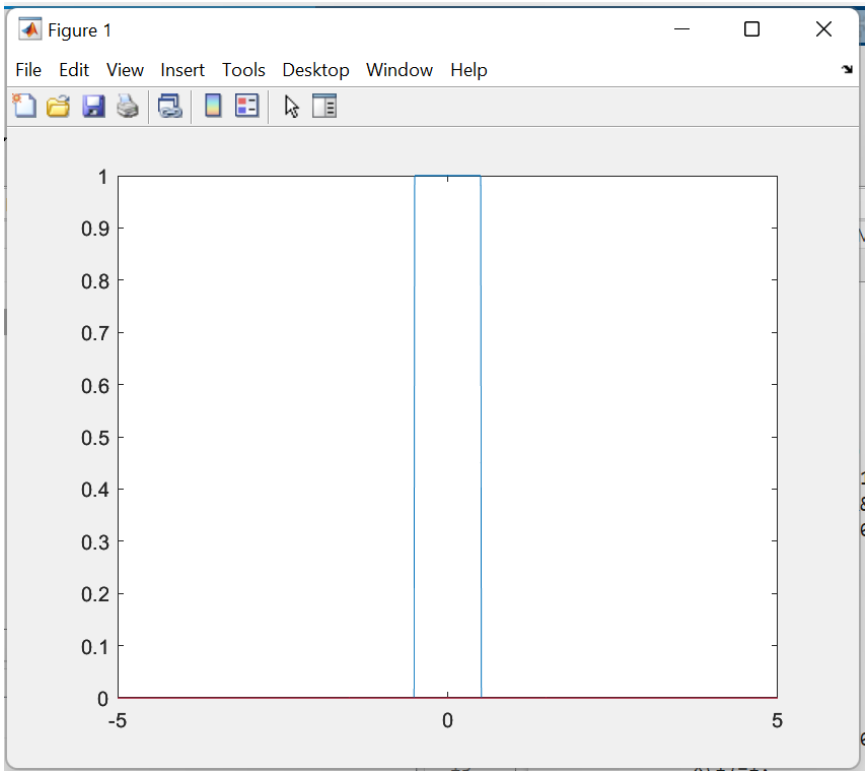
Report Of PCS Assignment-1 (for programming questions)

Ans-4)

(i)

Assumptions -> In boxt(t1 , t2) function; t2 >= t1

Figure->



Code ->

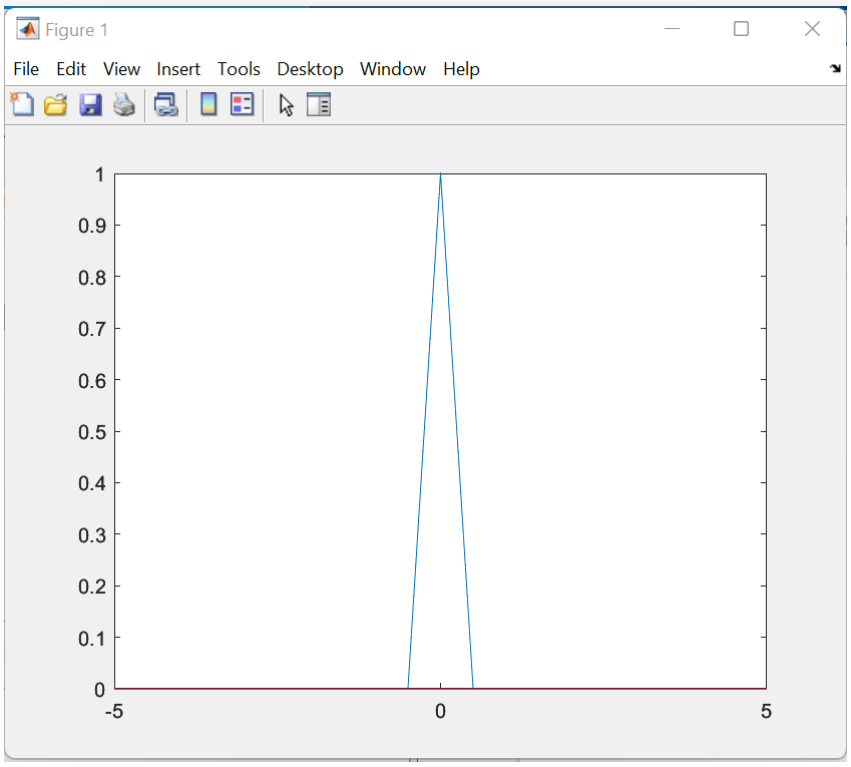
pcs_a1_1.m | pcs_a1_2.m

```
myfn=@boxt;
myfn(-5,5);
function boxt(t1,t2)
% please note that t2 >= t1
    if(t2~=t1)
        n=0:0.01:(t2-t1);
        x=zeros((t2-t1)*100 +1);
        for m=0:0.01:((t2-t1))
            if m+t1>=-0.5 && m+t1<=0.5
                x(int16(m*100) +1)=1;
            end
        end
        figure(1);
        plot(n+t1,x);
    else
        n=ones(1);
        x=zeros(1);
        if t1>=-0.5 && t1<=0.5
            x(1)=1;
        end
        figure(1);
        plot(n+t1-1,x);
    end
end
```

(ii)

Assumptions -> None

Figure ->



Code ->

pcs_a1_1.m pcs_a1_2.m

```
n=0:0.01:10;
x=zeros(1001);
for m=0:1:1001
    if m>=450 && m<=500
    x(m+1)=1+2*((m*0.01)-5);
    elseif m>500 && m<=550
    x(m+1)=1-2*((m*0.01)-5);
    end
end
figure(1);
plot(n-5,x);
```