

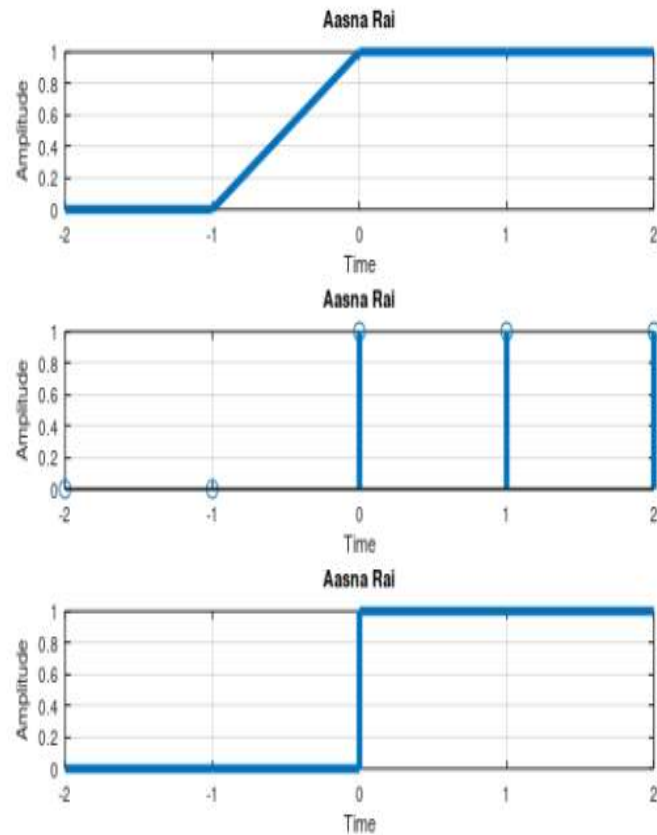
```

1 %program to print the unit step wave using loops and conditions%
2 t=-2:2;
3 x=zeros(1,length(t));
4 for i=1:length(t)
5     if(t(i)>=0)
6         x(i)=1;
7     else
8         x(i)=0;
9     end;
10 end;
11 figure
12 subplot(3,1,1)
13 plot(t,x,'linewidth',3);
14 xlabel('Time');
15 ylabel('Amplitude');
16 title('Aasna Rai');
17 grid on;
18
19 subplot(3,1,2)
20 stem(t,x,'linewidth',3);
21 xlabel('Time');
22 ylabel('Amplitude');
23 title('Aasna Rai');
24 grid on;
25
26 subplot(3,1,3)
27 stairs(t,x,'linewidth',3);
28 xlabel('Time');
29 ylabel('Amplitude');
30 title('Aasna Rai');
31 grid on;

```

Output

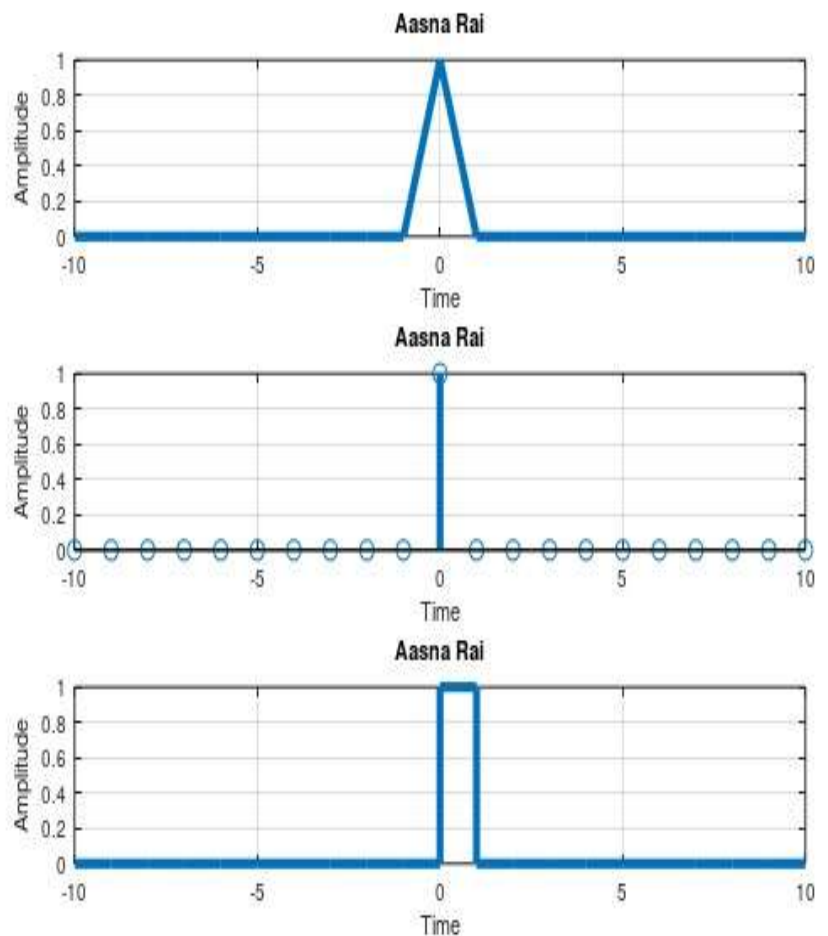
[Execution complete with exit code 0]



```

1 t=-10:10;
2 x=zeros(1,length(t));
3 for i=1:length(t)
4     if(t(i)==0)
5         x(i)=1;
6     else
7         x(i)=0;
8     end;
9 end;
10 figure
11 subplot(3,1,1)
12 plot(t,x,'linewidth',3);
13 xlabel('Time');
14 ylabel('Amplitude');
15 title('Aasna Rai');
16 grid on;
17
18 subplot(3,1,2)
19 stem(t,x,'linewidth',3);
20 xlabel('Time');
21 ylabel('Amplitude');
22 title('Aasna Rai');
23 grid on;
24
25 subplot(3,1,3)
26 stairs(t,x,'linewidth',3);
27 xlabel('Time');
28 ylabel('Amplitude');
29 title('Aasna Rai');
30 grid on;

```



```

1 t=-10:10;
2 x=zeros(1,length(t));
3 for i=1:length(t)
4     if(t(i)>=0)
5         x(i)=t(i);
6     else
7         x(i)=0;
8     end;
9 end;
10 figure
11 subplot(3,1,1)
12 plot(t,x,'linewidth',3);
13 xlabel('Time');
14 ylabel('Amplitude');
15 title('Aasna Rai');
16 grid on;
17
18 subplot(3,1,2)
19 stem(t,x,'linewidth',3);
20 xlabel('Time');
21 ylabel('Amplitude');
22 title('Aasna Rai');
23 grid on;
24
25 subplot(3,1,3)
26 stairs(t,x,'linewidth',3);
27 xlabel('Time');
28 ylabel('Amplitude');
29 title('Aasna Rai');
30 grid on;

```

Output

[Execution complete with exit code 0]

