ASSIGNMENT NO:-

PROGRAM NO:-

```
%Program: TRAPEZODIAL RULE
%Name:
%Roll No.:
%I/P: Function, lower limit, upper limit, n
function[]=PSJ_TRAP(fun,x0,xn,n)
h=(xn-x0)/n;
y0=feval(fun,x0);
yn=feval(fun,xn);
yr=0;
for i=1:1:n-1
yr=yr+feval(fun,x0+i*h);
end
I=(h/2)*(y0+yn+2*yr);
h
I
\text{WHSB\_TRAP}(@(x) \exp(x)/x, 1, 2, 8)
%h =
% 0.1250
%I =
% 3.0615
%quad(@(x) exp(x)/x,1,2,8)
%ans=
% 3.0591
```