```
declare function
declare variables {maximum minimum }
set up the variables
define function
enter maximum value of interval as upper
enter minimum value of interval as down
if(func(upper)*func(down)>0)
{ print Root values of this function do not exist in this interval
  Exit
}
    while(absolute value of (upper-down)>10^-5)
    {
         calculate the mean value of upper and down
         If(function of upper*function of mean<0)
              {replace down with mean}
         Else{replace upper with mean}
         Mean=(upper+down)/2 }
```

Print (upper+down)/2 as the approximation of root value