

Code memory

```
#include<stdio.h>
//prototype
double calculatevolume (double,double);
/*-----*/
void main()
{
double r,h,vol;
printf("Please give the reservoir radius R (m): ");
scanf("%lf",&r);
printf("Please give the water depth h (m): ");
scanf("%lf", &h);
vol = calculatevolume(r,h);
printf("the water volume is: %f",vol);

}
/*-----*/
double calculatevolume (double r, double h)
{
double answer;
//answer=(((3)*r)-h)/3)*3.14*h*h;
answer = 3.14159*h*h*(3.0*r-h)/3;
return(answer);
}
```

Working memory

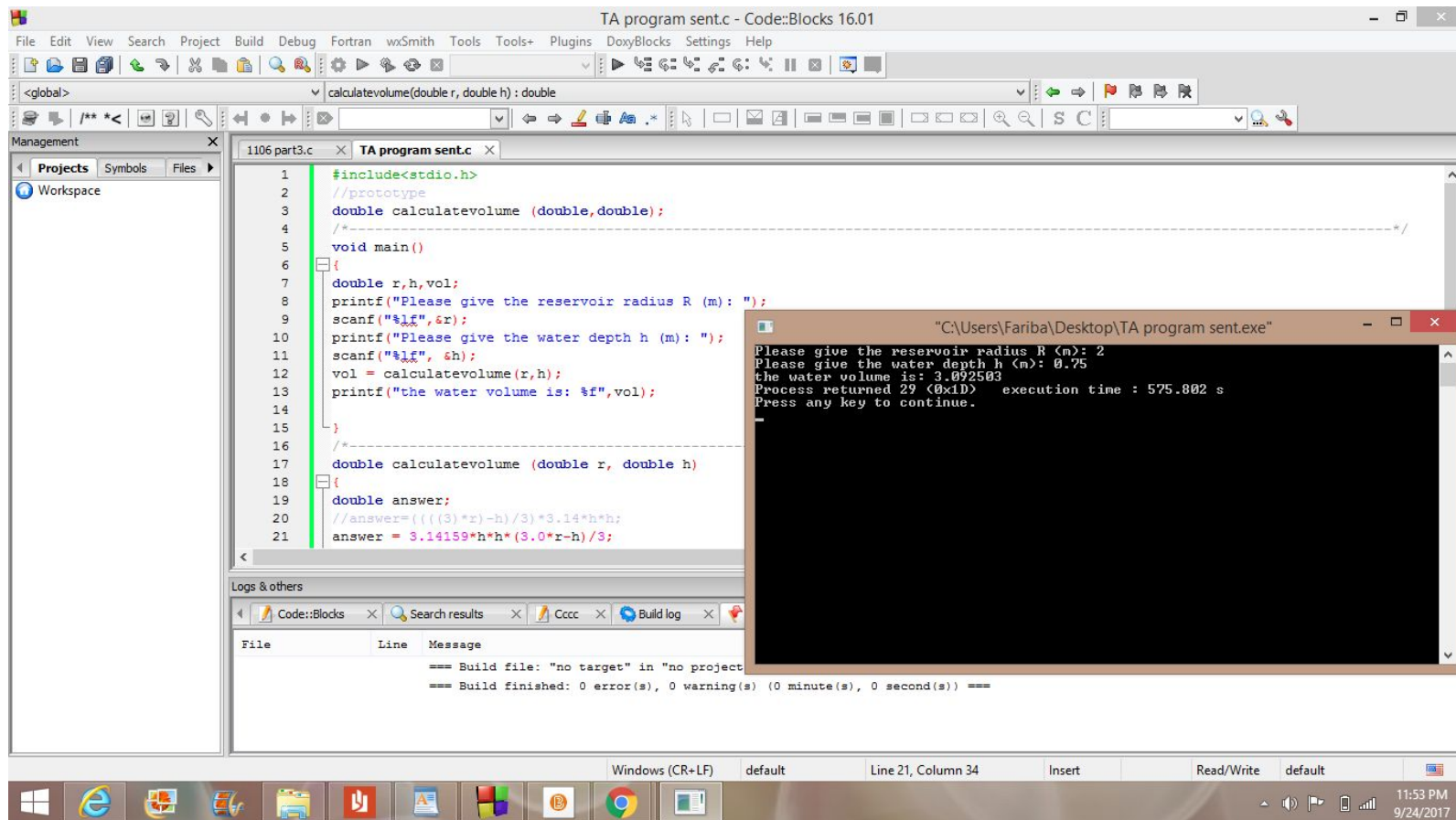
r: ? 2

h: ? 0.75

Volume: ? 3.09

cpu

$3.14159 * h * h * (3.0 * r - h) / 3$



```

#include<stdio.h>
#include<math.h>

double calculateradiation (double,double,double);
/*-----*/
void main()
{
double l,w,e,T,SA,y,c;
double Tempk;
printf ("Enter a length in meters: ");
scanf ("%lf", &l);
printf ("Enter a width in meters: ");
scanf ("lf", &w) ;
printf ("Enter the emissivity: ");
scanf ("%lf", &e);
printf ("Enter a temperature in celcius: ");
scanf ("%lf", &T);

SA = l*w;

Tempk = (T+273.15);

y = calculateradiation (Tempk,SA,e);

printf("energy is: %f watts",y);

}
/*-----*/
double calculateradiation (double Tempk, double SA, double e)
{
double Energy;
Energy = (SA*e*5.67e-8*(Tempk*Tempk*Tempk*Tempk));

return (Energy);
}

```

T: ?

