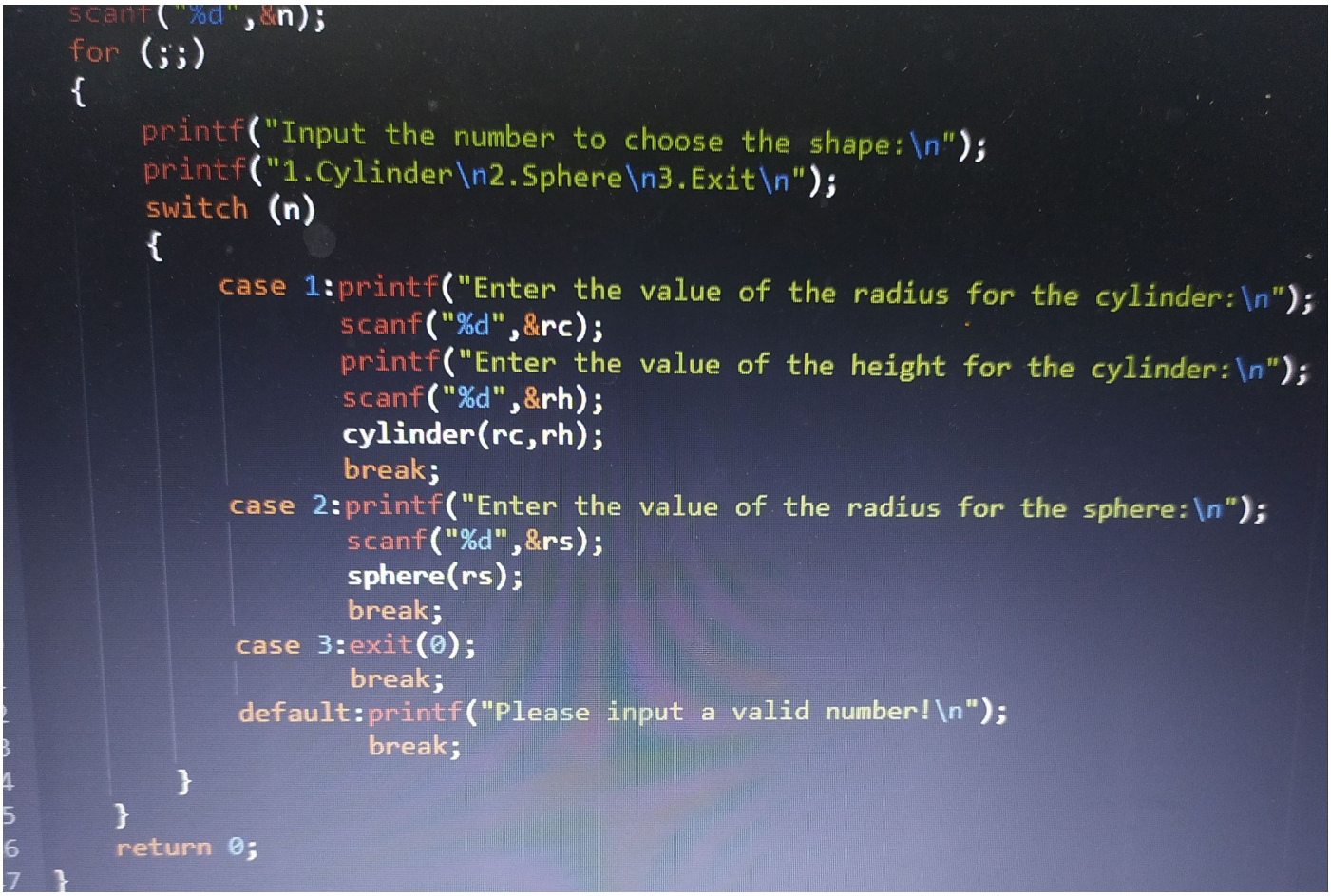
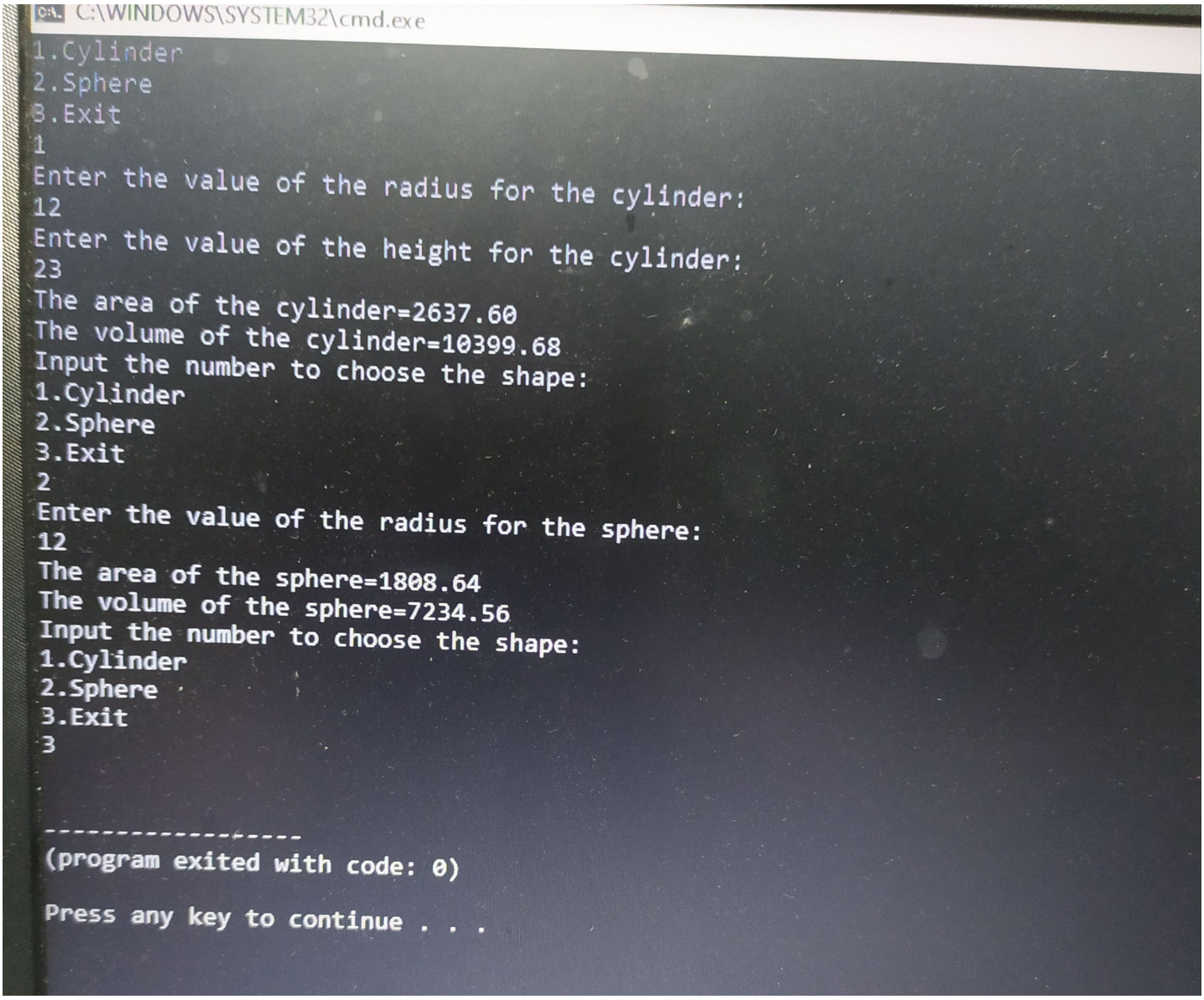
ain.c

```c
#include <stdio.h>
#include <stdlib.h>
#define pi 3.14
void cylinder(int r,int h)
{
    float a,v;
    a=(2*pi*r*h)+(2*pi*r*r);
    v=pi*r*r*h;
    printf("The area of the cylinder=%0.2f\n",a);
    printf("The volume of the cylinder=%0.2f\n",v);
}
void sphere(int r)
{
    float a,v;
    a=4*pi*r*r;
    v=(4/3.0)*pi*r*r*r;
    printf("The area of the sphere=%0.2f\n",a);
    printf("The volume of the sphere=%0.2f\n",v);
}
int main()
{
    int n,rc,rh,rs;
    scanf("%d",&n);
    for (;;)
    {
        printf("Input the number to choose the shape:\n");
        printf("1.Cylinder\n2.Sphere\n3.Exit\n");
        switch (n)
        {
            case 1:printf("Enter the value of the radius for the cylinder:\n");
```



```
    scanf("%d",&n);
    for (;;)
    {
        printf("Input the number to choose the shape:\n");
        printf("1.Cylinder\n2.Sphere\n3.Exit\n");
        switch (n)
        {
            case 1:printf("Enter the value of the radius for the cylinder:\n");
                   scanf("%d",&rc);
                   printf("Enter the value of the height for the cylinder:\n");
                   scanf("%d",&rh);
                   cylinder(rc,rh);
                   break;
             case 2:printf("Enter the value of the radius for the sphere:\n");
                    scanf("%d",&rs);
                    sphere(rs);
                    break;
             case 3:exit(0);
                    break;
             default:printf("Please input a valid number!\n");
                     break;
        }
    }
    return 0;
}
```


C:\WINDOWS\SYSTEM32\cmd.exe
1.Cylinder
2.Sphere
3.Exit
1
Enter the value of the radius for the cylinder:
12
Enter the value of the height for the cylinder:
23
The area of the cylinder=2637.60
The volume of the cylinder=10399.68
Input the number to choose the shape:
1.Cylinder
2.Sphere
3.Exit
2
Enter the value of the radius for the sphere:
12
The area of the sphere=1808.64
The volume of the sphere=7234.56
Input the number to choose the shape:
1.Cylinder
2.Sphere
3.Exit
3
(program exited with code: 0)
Press any key to continue . . .