

# **Taazaa Training**

## **Assignment 2**

**“Day 1 Revision”**

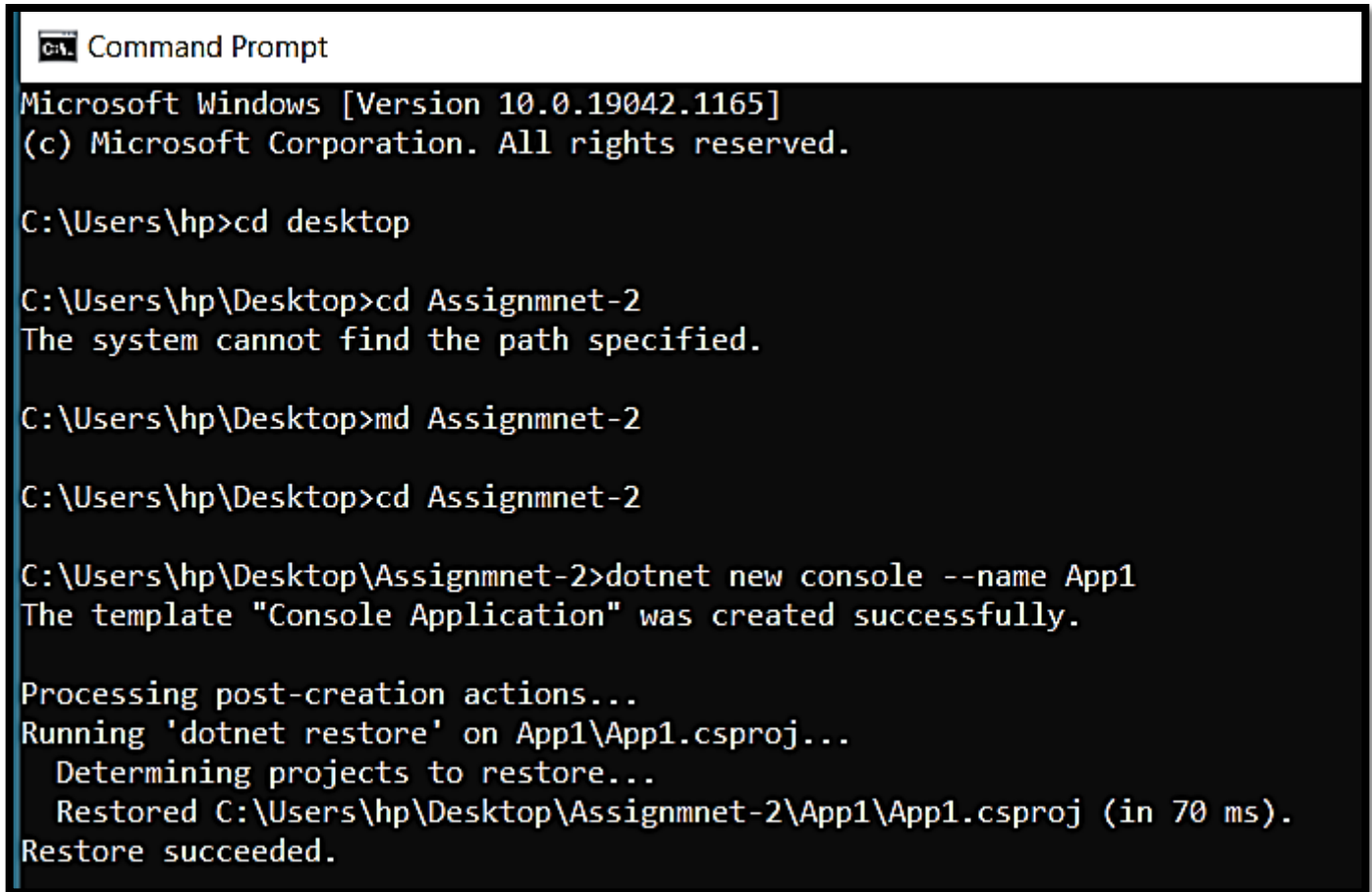
**(Library creation and its references)**

**Submitted by: -**

**Gurpreet Singh**

**Step1) make new directory let say Assignmnet-2**

**Step2) create a new application App1 using “dotnet new console --name App1”**



```
Command Prompt
Microsoft Windows [Version 10.0.19042.1165]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp>cd desktop

C:\Users\hp\Desktop>cd Assignmnet-2
The system cannot find the path specified.

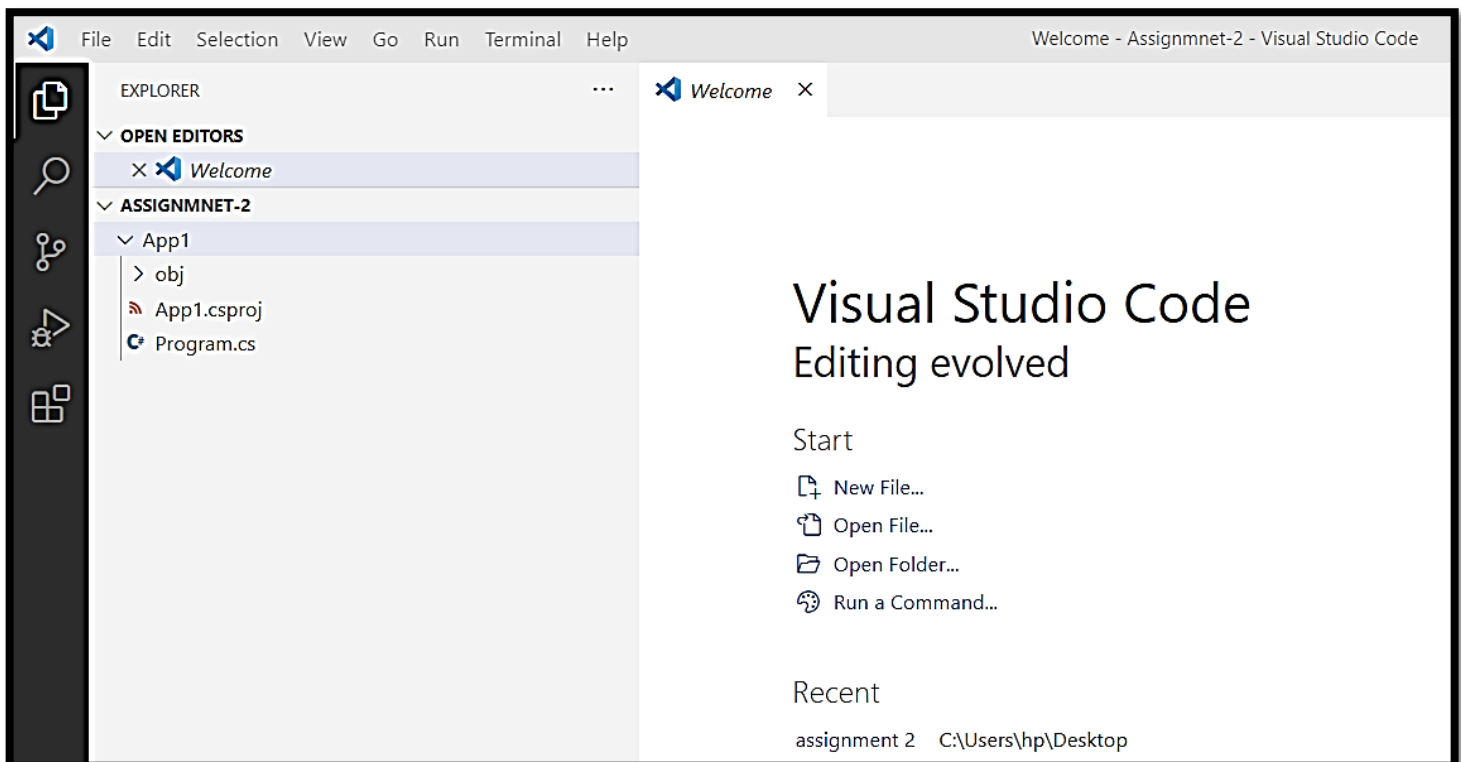
C:\Users\hp\Desktop>md Assignmnet-2

C:\Users\hp\Desktop>cd Assignmnet-2

C:\Users\hp\Desktop\Assignmnet-2>dotnet new console --name App1
The template "Console Application" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on App1\App1.csproj...
  Determining projects to restore...
  Restored C:\Users\hp\Desktop\Assignmnet-2\App1\App1.csproj (in 70 ms).
Restore succeeded.
```

**Step 3) to check App1 creation use command “code .” to open it in vscode**



**Step 4) Application App1 compiled and run successfully**

FileEditSelectionViewGoRunTerminalHelp

Program.cs - Assignmnet-2 - Visual Studio Code

EXPLORES

OPEN EDITORS

Program.cs App1

ASSIGNMNET-2

.vscode

App1

bin

obj

App1.csproj

Program.cs

Program.cs X

App1 > Program.cs > ...

```
1 using System;
2
3 namespace App1
4 {
5     0 references
6     class Program
7     {
8         0 references
9         static void Main(string[] args)
10        {
11            Console.WriteLine("Hello World!");
12        }
13 }
```

OUTPUT

TERMINAL

DEBUG CONSOLE

PROBLEMS

C:\Users\hp\Desktop\Assignmnet-2\App1>dotnet build  
Microsoft (R) Build Engine version 16.11.0+0538acc04 for .NET  
Copyright (C) Microsoft Corporation. All rights reserved.  
  
Determining projects to restore...  
All projects are up-to-date for restore.  
App1 -> C:\Users\hp\Desktop\Assignmnet-2\App1\bin\Debug\net5.0\App1.dll  
  
Build succeeded.  
0 Warning(s)  
0 Error(s)  
  
Time Elapsed 00:00:05.50  
  
C:\Users\hp\Desktop\Assignmnet-2\App1>dotnet run  
Hello World!  
  
C:\Users\hp\Desktop\Assignmnet-2\App1>

OUTLINE

## Now Creating library in Assignmnet-2

**Step 5) Creating two libraries named area and perimeter inside Assignmnet-2 using  
“dotnet new classlib -o <libname> ”**

```
Command Prompt

C:\Users\hp\Desktop\Assignmnet-2>dotnet new classlib -o area
The template "Class library" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on area\area.csproj...
  Determining projects to restore...
  Restored C:\Users\hp\Desktop\Assignmnet-2\area\area.csproj (in 61 ms).
Restore succeeded.

C:\Users\hp\Desktop\Assignmnet-2>dotnet new classlib -o perimeter
The template "Class library" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on perimeter\perimeter.csproj...
  Determining projects to restore...
  Restored C:\Users\hp\Desktop\Assignmnet-2\perimeter\perimeter.csproj (in 94 ms).
Restore succeeded.

C:\Users\hp\Desktop\Assignmnet-2>
```

## Step 6) Now Creating new solution file name myproject

```
Command Prompt

C:\Users\hp\Desktop\Assignmnet-2>dotnet new sln --name myproject
The template "Solution File" was created successfully.

C:\Users\hp\Desktop\Assignmnet-2>
```

Here ,Inside Assignment-2 there is an application named app1 library named area and perimeter and solution file name myproject.

```
Command Prompt

C:\Users\hp\Desktop\Assignmnet-2>dir
Volume in drive C is Windows
Volume Serial Number is 6E73-904C

Directory of C:\Users\hp\Desktop\Assignmnet-2

14-08-2021  00:23    <DIR>          .
14-08-2021  00:23    <DIR>          ..
13-08-2021  23:15    <DIR>          .vscode
13-08-2021  22:47    <DIR>          App1
14-08-2021  00:15    <DIR>          area
13-08-2021  23:30    <DIR>          myproject
14-08-2021  00:16    <DIR>          perimeter
               0 File(s)              0 bytes
               7 Dir(s)  155,521,028,096 bytes free

C:\Users\hp\Desktop\Assignmnet-2>
```

Step 7) now, we are adding App1.csproj to solution file

```
Command Prompt

C:\Users\hp\Desktop\Assignmnet-2\myproject>dotnet sln add ../App1/App1.csproj
Project `..\App1\App1.csproj` added to the solution.

C:\Users\hp\Desktop\Assignmnet-2\myproject>
```

Step 8) Similarly we are going to add area.csproj and perimeter.proj in our solution file name myproject

```
Command Prompt

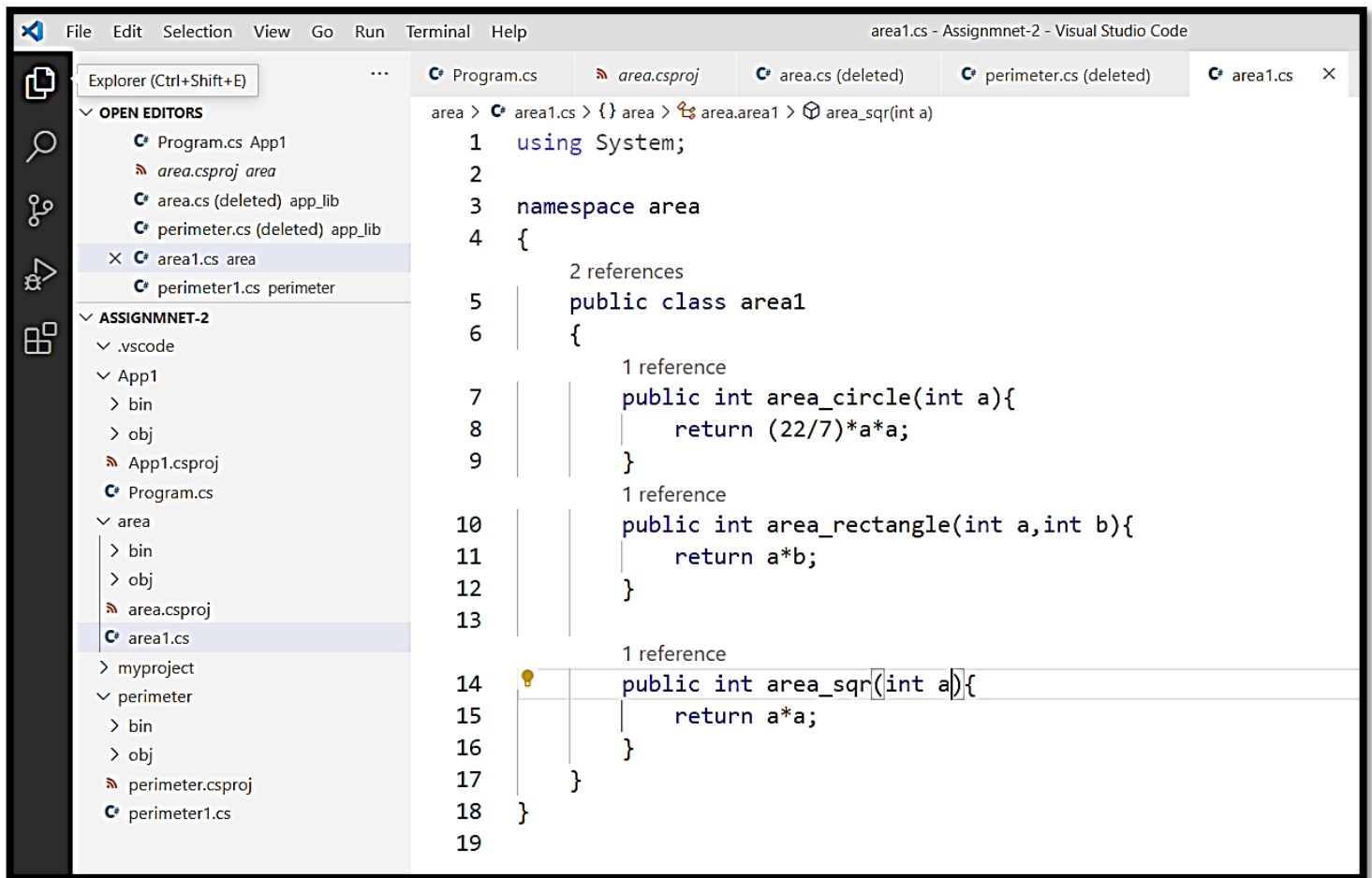
C:\Users\hp\Desktop\Assignmnet-2\myproject>dotnet sln add ../area/area.csproj
Project `..\area\area.csproj` added to the solution.

C:\Users\hp\Desktop\Assignmnet-2\myproject>dotnet sln add ../perimeter/perimeter.csproj
Project `..\perimeter\perimeter.csproj` added to the solution.

C:\Users\hp\Desktop\Assignmnet-2\myproject>
```

**Step 9) Now we are going to create some function inside classes of area and perimeter library**

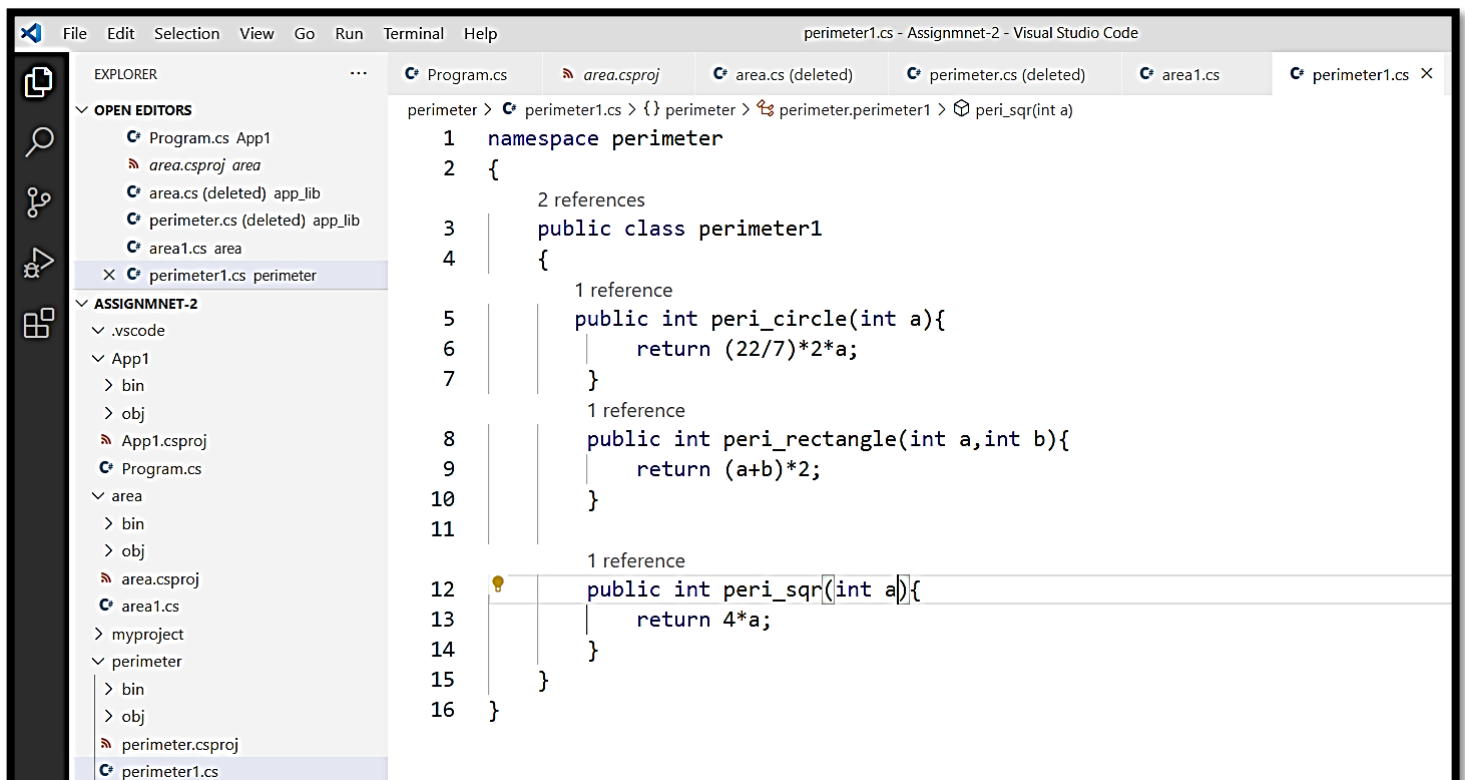
## Area1 class



The screenshot shows the Visual Studio Code editor with the file explorer on the left and the code editor on the right. The file explorer shows the project structure with the 'area' folder selected. The code editor displays the 'area1.cs' file with the following code:

```
1 using System;
2
3 namespace area
4 {
5     2 references
6     public class area1
7     {
8         1 reference
9         public int area_circle(int a){
10             return (22/7)*a*a;
11         }
12         1 reference
13         public int area_rectangle(int a,int b){
14             return a*b;
15         }
16         1 reference
17         public int area_sqr(int a){
18             return a*a;
19         }
20     }
21 }
```

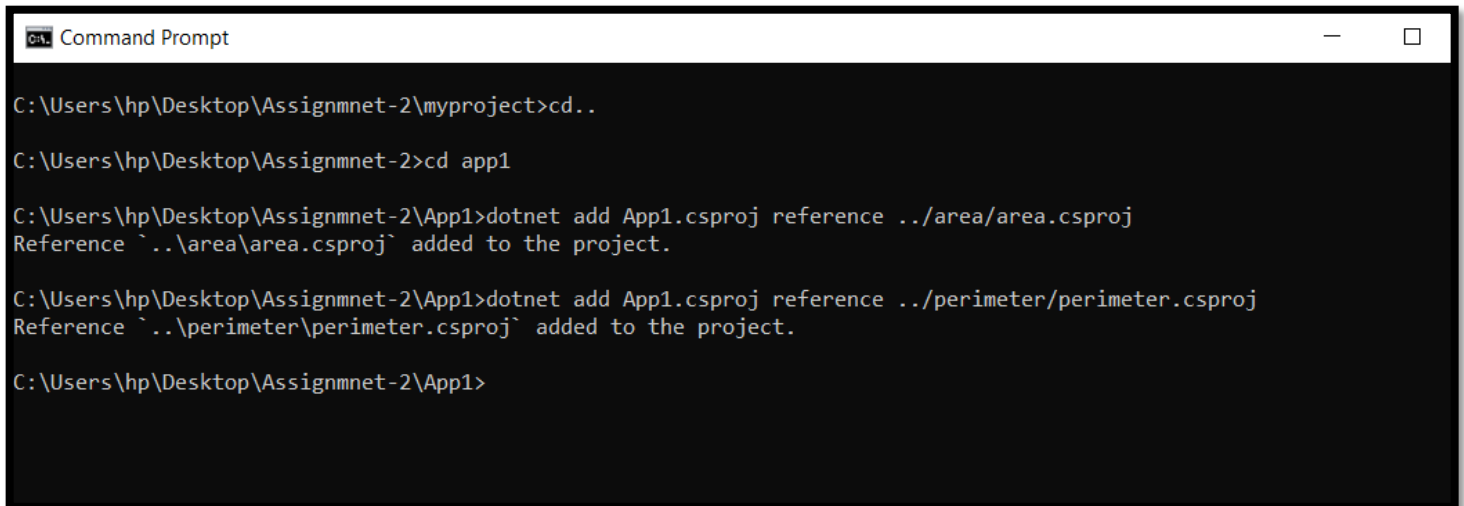
## Perimeter1 class



The screenshot shows the Visual Studio Code editor with the file explorer on the left and the code editor on the right. The file explorer shows the project structure with the 'perimeter' folder selected. The code editor displays the 'perimeter1.cs' file with the following code:

```
1 namespace perimeter
2 {
3     2 references
4     public class perimeter1
5     {
6         1 reference
7         public int peri_circle(int a){
8             return (22/7)*2*a;
9         }
10         1 reference
11         public int peri_rectangle(int a,int b){
12             return (a+b)*2;
13         }
14         1 reference
15         public int peri_sqr(int a){
16             return 4*a;
17         }
18     }
19 }
```

**Step 10) Now we are going to take references from area and perimeter library to our application App1.csproj**



```
Command Prompt

C:\Users\hp\Desktop\Assignmnet-2\myproject>cd..

C:\Users\hp\Desktop\Assignmnet-2>cd app1

C:\Users\hp\Desktop\Assignmnet-2\App1>dotnet add App1.csproj reference ../area/area.csproj
Reference `..\area\area.csproj` added to the project.

C:\Users\hp\Desktop\Assignmnet-2\App1>dotnet add App1.csproj reference ../perimeter/perimeter.csproj
Reference `..\perimeter\perimeter.csproj` added to the project.

C:\Users\hp\Desktop\Assignmnet-2\App1>
```

**Step 11) Now we are going to create obj of classes in our application app1 inside program.cs as shown below:-**

```
using System;
using area;
using perimeter;

namespace App1
{
    class Program
    {
        static void Main(string[] args)
        {
            area1 a=new area1();
            perimeter1 p= new perimeter1();

            Console.WriteLine("Area and perimeter of circle");
            Console.WriteLine("enter radius of circle");
            int r=Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("area and perimeter of circle is"+ a.area_circle(r)+" and "+p.peri_circle(r) );
            Console.WriteLine("Area and perimeter of rectangle");

            Console.WriteLine("enter length of rectangle");
            int l=Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("enter width of rectangle");
            int b=Convert.ToInt32(Console.ReadLine());

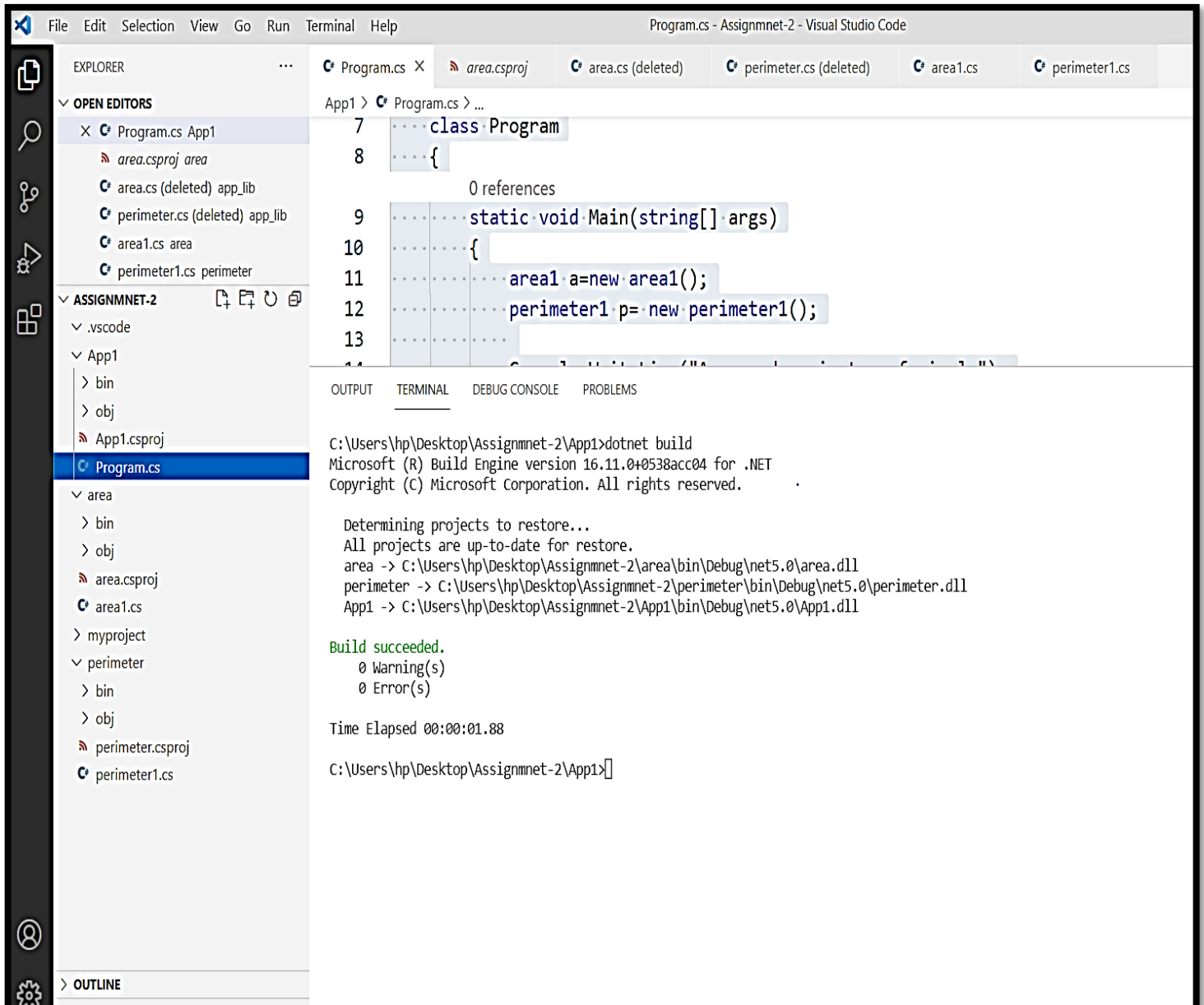
            Console.WriteLine("area and perimeter of rectangle is"+ a.area_rectangle(l,b) +" and "+p.peri_rectangle(l,b) );
            Console.WriteLine("Area and perimeter of square");
            Console.WriteLine("enter side :");
            int s=Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("area and perimeter of square is"+ a.area_sqr(s)+" and "+p.peri_sq
r(s) );

        }
    }
}
```



**Step 12) Now we compile our program.cs inside App1 using “dotnet build” command**

### **Build successfully with no error**



**Step 13) Now we run program.cs which is inside App1 using “dotnet run” command**

### Run successfully

EXPLORED

OPEN EDITORS

- Program.cs App1
- area.csproj area
- area.cs (deleted) app\_lib
- perimeter.cs (deleted) app\_lib
- area1.cs area
- perimeter1.cs perimeter

ASSIGNMNET-2

- .vscode
- App1
  - bin
  - obj
- App1.csproj
- Program.cs
- area
  - bin
  - obj
- area.csproj
- area1.cs
- myproject
- perimeter
  - bin
  - obj
- perimeter.csproj
- perimeter1.cs

App1 > Program.cs > ...

```
7 ... class Program
8 ... {
9     0 references
10    ... static void Main(string[] args)
11    ... {
12    ...     area1 a=new area1();
13    ...     perimeter1 p= new perimeter1();
14    ...     Console.WriteLine("Area and perimeter of circle");
15    ...     Console.WriteLine("enter radius of circle");
```

OUTPUT TERMINAL DEBUG CONSOLE PROBLEMS

C:\Users\hp\Desktop\Assignmnet-2\App1>dotnet run

Area and perimeter of circle

enter radius of circle

2

area and perimeter of circle is12 and 12

Area and perimeter of rectangle

enter length of rectangle

2

enter width of rectangle

3

area and perimeter of rectangle is6 and 10

Area and perimeter of square

enter side :

5

area and perimeter of square is25 and 20

C:\Users\hp\Desktop\Assignmnet-2\App1>