Day 2

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Date : 20/08/2024

Program 1 :

Code :

Program.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Prgm1
{
  class Program
  {
    static void Main(string[] args)
    {
      Console.WriteLine("Enter a account id");
      int id = Convert.ToInt32(Console.ReadLine());
      Console.WriteLine("Enter type");
      string type = Console.ReadLine();
      Console.WriteLine("Enter Account balance");
      double balance = Convert.ToDouble(Console.ReadLine());
      Console.WriteLine("Enter Withdraw amt");
      double withdraw = Convert.ToDouble(Console.ReadLine());

      Account ac = new Account(id,type,balance) ;
      ac.GetDetails();
      if (ac.withdraw(withdraw))
      {
        Console.WriteLine("New balance:"+ac.balance_out);
      }
      else
      {
        Console.WriteLine("Insufficient balance");
      }
      Console.ReadKey();

    }
  }
}
```

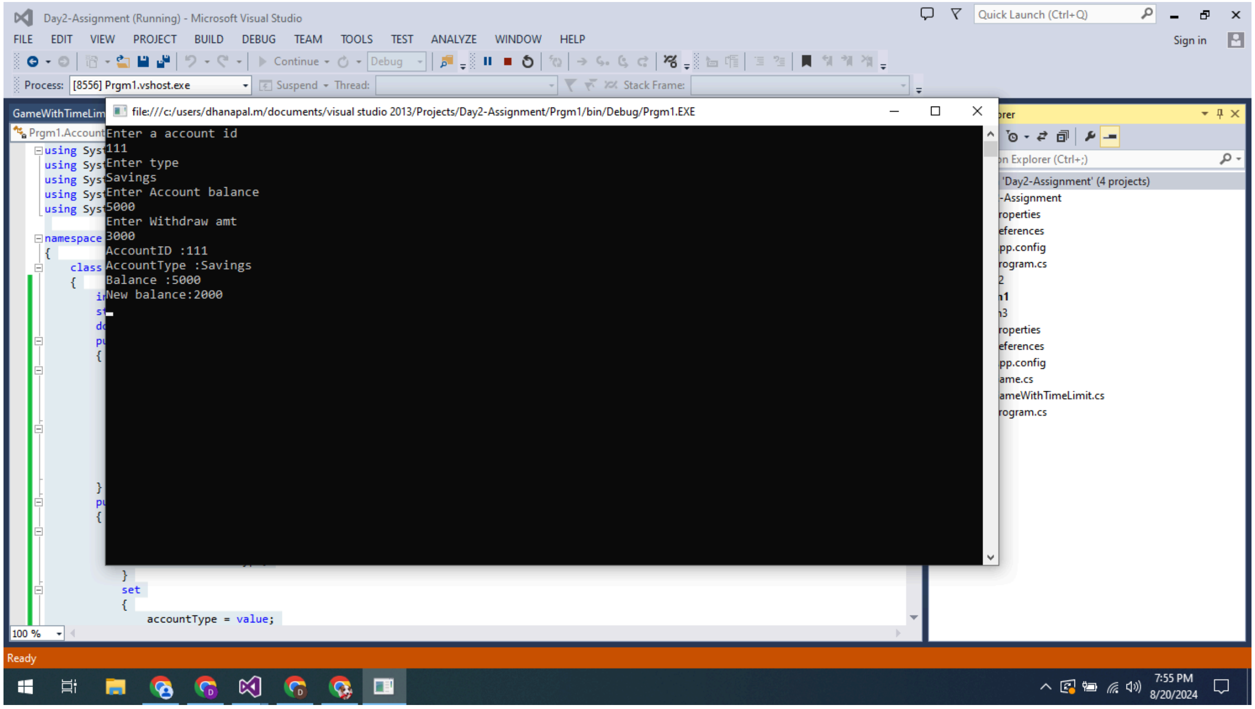
Account.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Prgm1
{
  class Account
  {
    int id;
    string accountType;
    double balance;
    public int idout
    {
      get
      {
        return id;
      }
      set
      {
        id = value;
      }
    }
    public string actype_out
    {
      get
      {
        return accountType;
      }
      set
      {
        accountType = value;
      }
    }
    public double balance_out
    {
      get
      {
        return balance;
      }
      set
      {
        balance = value;
      }
    }
    public Account(int id,string type,double balance)
    {
      this.id = id;
```

```
            this.accountType = type;
            this.balance = balance;
        }

        public string GetDetails()
        {
            Console.WriteLine("AccountID :" + id);
            Console.WriteLine("AccountType :" + accountType);
            Console.WriteLine("Balance :" + balance);
            return null;

        }
        public bool withdraw(double amount)
        {
            if(balance > =amount)
            {
                balance = balance - amount;
                return true;
            }
            else
            {
                return false;
            }
        }

    }
}
```

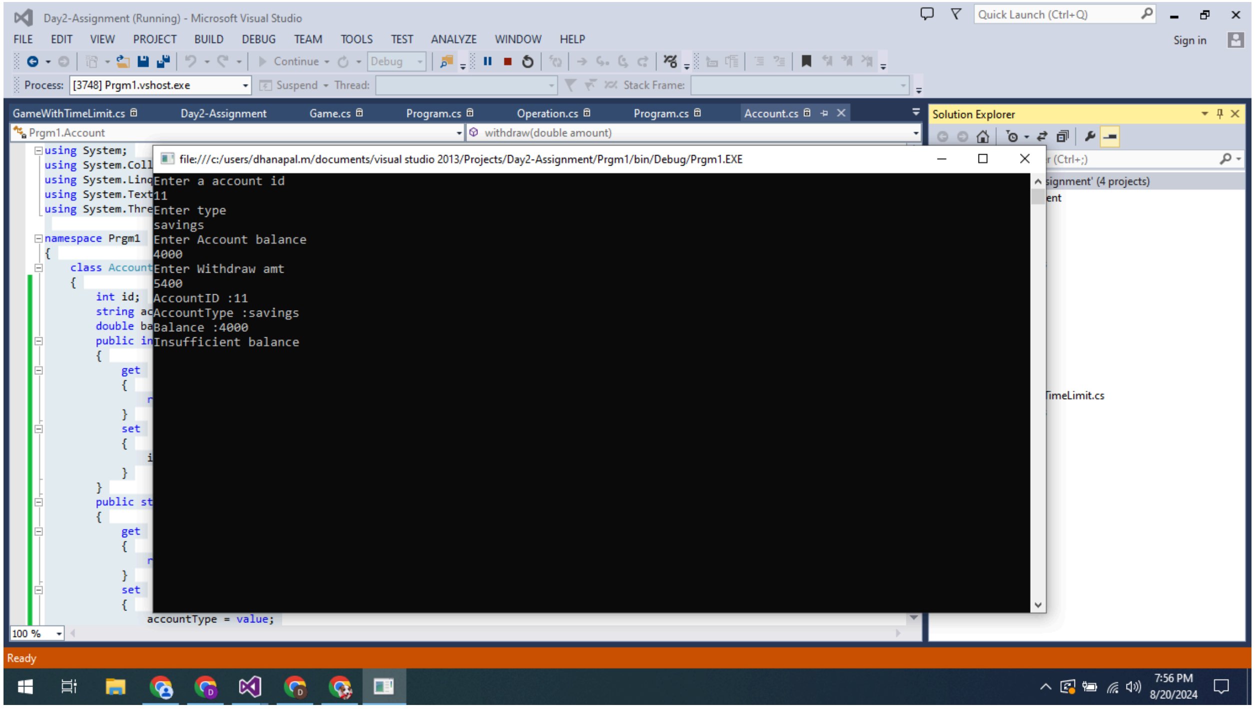
Output :

Case 1(Balance >=Withdraw):


Day2-Assignment (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
Process: [8556] Prgm1.vshost.exe
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Prgm1/bin/Debug/Prgm1.EXE
Ready
7:55 PM
8/20/2024

```
Enter a account id
111
Enter type
Savings
Enter Account balance
5000
Enter Withdraw amt
3000
AccountID :111
AccountType :Savings
Balance :5000
New balance:2000
```

Case 2(Balance<Withdraw):


Day2-Assignment (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
Process: [3748] Prgm1.vshost.exe
GameWithTimeLimit.cs Day2-Assignment Game.cs Program.cs Operation.cs Program.cs Account.cs
Prgm1.Account
withdraw(double amount)
Solution Explorer
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Prgm1/bin/Debug/Prgm1.EXE
Ready
7:56 PM
8/20/2024

```
Enter a account id
11
Enter type
savings
Enter Account balance
4000
Enter Withdraw amt
5400
AccountID :11
AccountType :savings
Balance :4000
Insufficient balance
```

Program 2

Code :

Program.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Pgm2
{
  class Program
  {
    static void Main(string[] args)
    {
      Console.WriteLine("Enter the operator");
      string op = Console.ReadLine();
      Operation obj = new Operation();
      if (op.Equals("+"))
      {
        Console.WriteLine("Enter two operands for Addition");
        int x = Convert.ToInt32(Console.ReadLine());
        int y = Convert.ToInt32(Console.ReadLine());
        int sol=obj.add(x, y);
        Console.WriteLine("Result of "+x+" + "+y+" is "+sol);

      }
      else if (op.Equals("-"))
      {
        Console.WriteLine("Enter two operands for Subtraction");
        int x = Convert.ToInt32(Console.ReadLine());
        int y = Convert.ToInt32(Console.ReadLine());
        int sol
          = obj.sub(x, y);
        Console.WriteLine("Result of " + x + " - " + y + " is " + sol);

      }
      else if (op.Equals("*"))
      {
        Console.WriteLine("Enter two operands for Multiplication");
        int x = Convert.ToInt32(Console.ReadLine());
        int y = Convert.ToInt32(Console.ReadLine());
        int sol = obj.mul(x, y);
        Console.WriteLine("Result of " + x + " * " + y + " is " + sol);

      }
      else if (op.Equals("/"))
      {
        Console.WriteLine("Enter two operands for Divison");
        double x = Convert.ToDouble(Console.ReadLine());
        double y = Convert.ToDouble(Console.ReadLine());
        double sol;
        obj.div(x, y,out sol);
        Console.WriteLine("Result of " + x + " / " + y + " is " + sol);
      }
      else
      {
        Console.WriteLine("Please enter a valid operator");
      }
      Console.ReadKey();
    }
  }
```

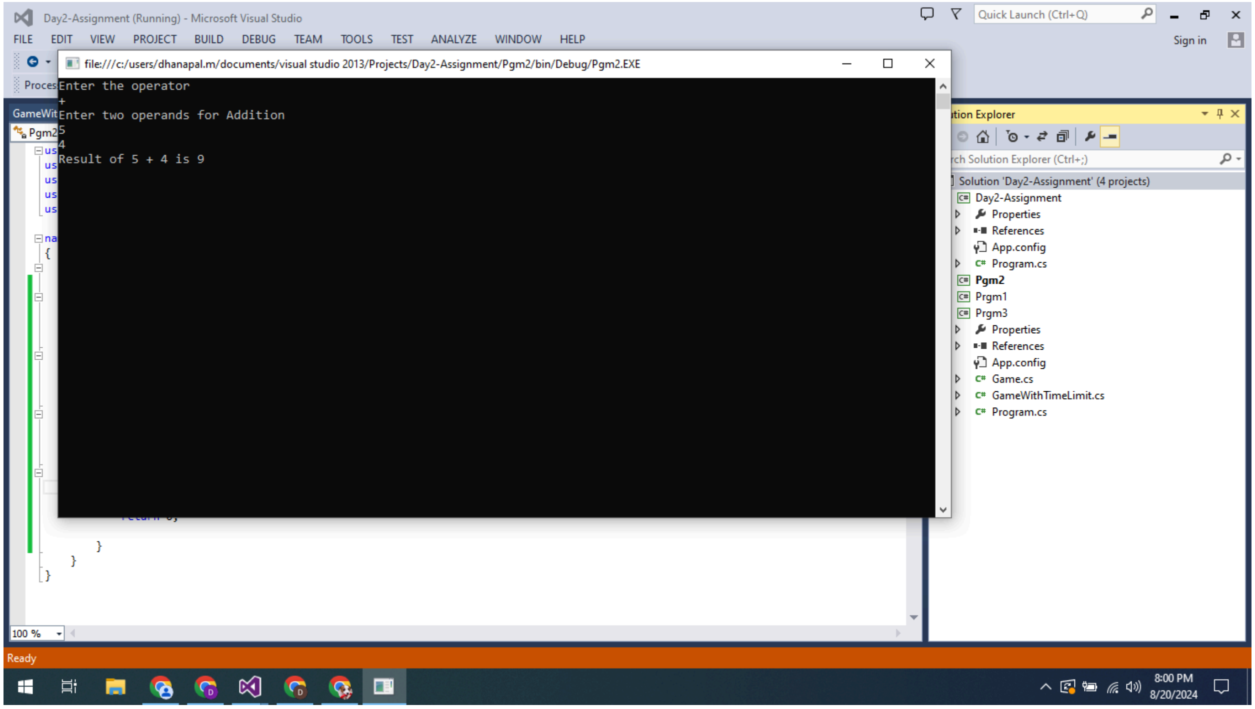
```
}
```

Operation.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace Pgm2
{
  class Operation
  {
    public int add(int a,int b)
    {
      return a + b;
    }
    public int sub(int a, int b)
    {
      return a - b;
    }
    public int mul(int a, int b)
    {
      return a * b;
    }
    public double div(double a, double b,out double sol)
    {
      sol=a/b;
      return 0;
    }
  }
}
```

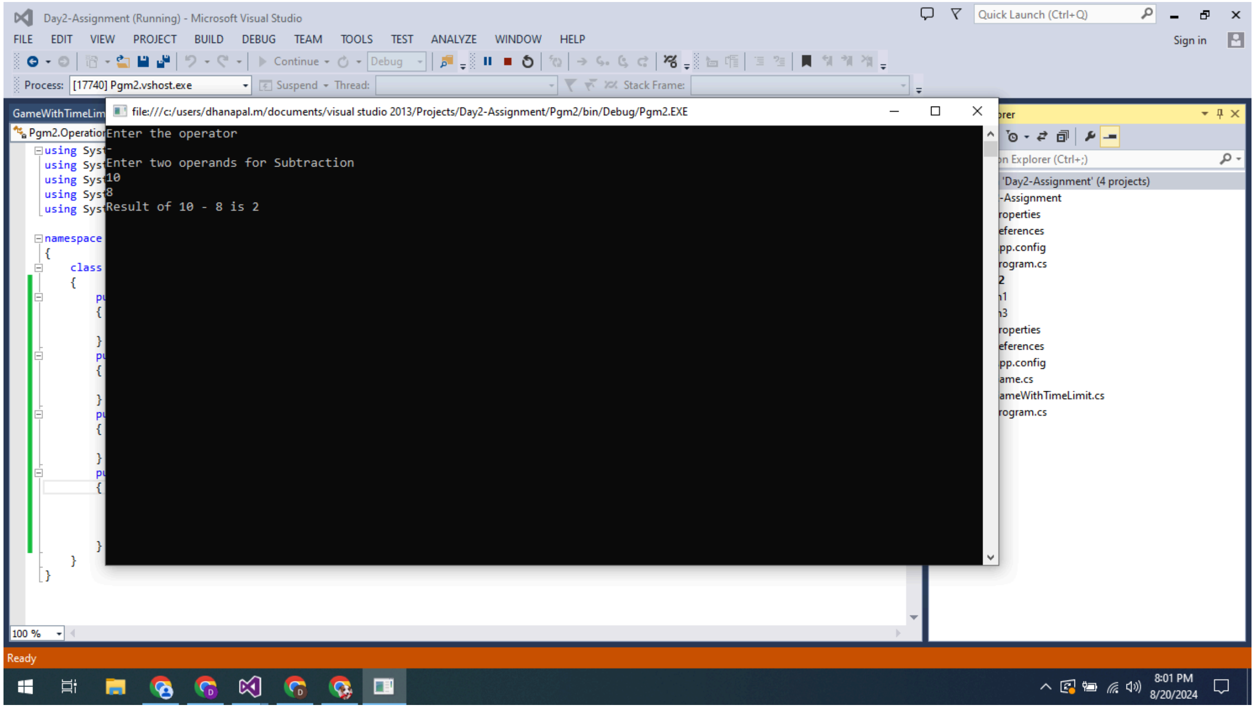
Output:

Case 1 (Addition):


Day2-Assignment (Running) - Microsoft Visual Studio
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Pgm2/bin/Debug/Pgm2.EXE
Solution 'Day2-Assignment' (4 projects)
Ready
8:00 PM
8/20/2024

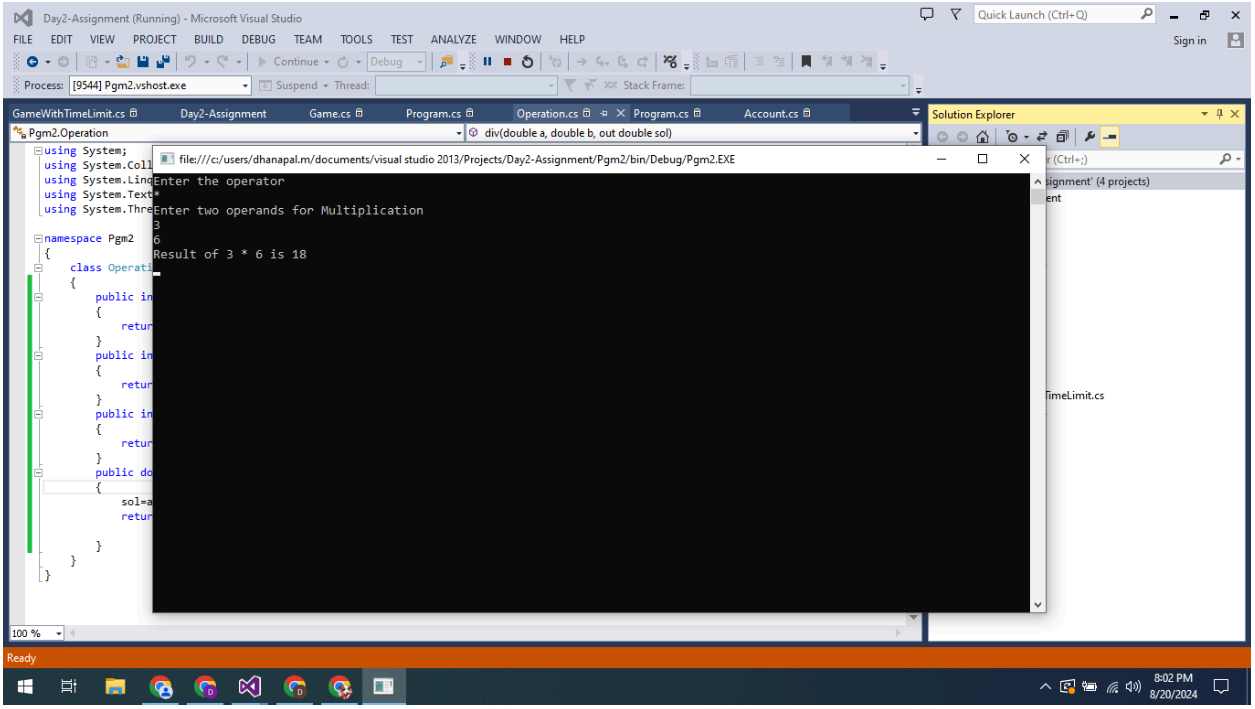
```
Enter the operator
+
Enter two operands for Addition
5
4
Result of 5 + 4 is 9
```

Case 2(Subtraction):


Day2-Assignment (Running) - Microsoft Visual Studio
Process: [17740] Pgm2.vshost.exe
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Pgm2/bin/Debug/Pgm2.EXE
Ready
8:01 PM
8/20/2024

```
Enter the operator
-
Enter two operands for Subtraction
10
8
Result of 10 - 8 is 2
```

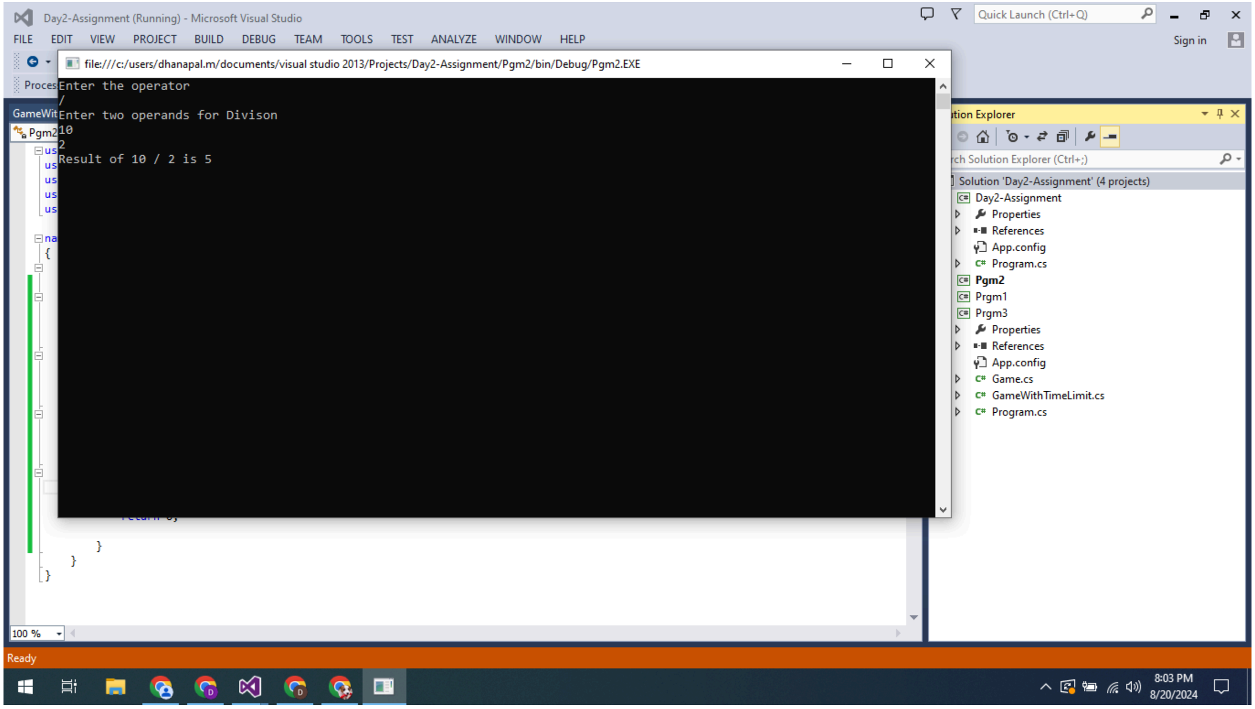
Case 3(Multiplication):


Day2-Assignment (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
Quick Launch (Ctrl+Q)
Sign in
Continue
Debug
Process: [9544] Pgm2.vshost.exe
Suspend
Thread:
Stack Frame:
GameWithTimeLimit.cs
Day2-Assignment
Game.cs
Program.cs
Operation.cs
Program.cs
Account.cs
Pgm2.Operation
div(double a, double b, out double sol)
Solution Explorer
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Pgm2/bin/Debug/Pgm2.EXE
100 %
Ready
8:02 PM
8/20/2024

```
using System;
using System.Coll
using System.Linq
using System.Text
using System.Thre

namespace Pgm2
{
    class Operati
    {
        public in
        {
            retur
        }
        public in
        {
            retur
        }
        public in
        {
            retur
        }
        public do
        {
            sol=a
            retur

        }
    }
}
```

```
Enter the operator
*
Enter two operands for Multiplication
3
6
Result of 3 * 6 is 18
```

Case 4(Division):


Day2-Assignment (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
Quick Launch (Ctrl+Q)
Sign in
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Pgm2/bin/Debug/Pgm2.EXE
tion Explorer
ch Solution Explorer (Ctrl+;)
Solution 'Day2-Assignment' (4 projects)
Day2-Assignment
Properties
References
App.config
Program.cs
Pgm2
Prgm1
Prgm3
Properties
References
App.config
Game.cs
GameWithTimeLimit.cs
Program.cs
100 %
Ready
8:03 PM
8/20/2024

```
Enter the operator
/
Enter two operands for Divison
10
2
Result of 10 / 2 is 5
```

Program 3:

Code:

Program.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Prgm3
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a game");
            string game = Console.ReadLine();
            Console.WriteLine("Enter the Max No.of Players");
            int maxplayers = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter a game with time limit");
            string gamewithlimit = Console.ReadLine();
            Console.WriteLine("Enter the Max No.of Players");
            int maxplayerswithlimit = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter the time limit in minutes");
            int time = Convert.ToInt32(Console.ReadLine());
            GameWithTimeLimit gamewithlimitobj = new GameWithTimeLimit();
            Game gameobj = new Game();
            gameobj.gamename = game;
            gameobj.maxplayers = maxplayers;
            Console.WriteLine(gameobj.ToString());
            gamewithlimitobj.gamename = gamewithlimit;
            gamewithlimitobj.maxplayers = maxplayerswithlimit;
            gamewithlimitobj.timelimit = time;
            Console.WriteLine(gamewithlimitobj.ToString());
            Console.ReadKey();
        }
    }
}
```

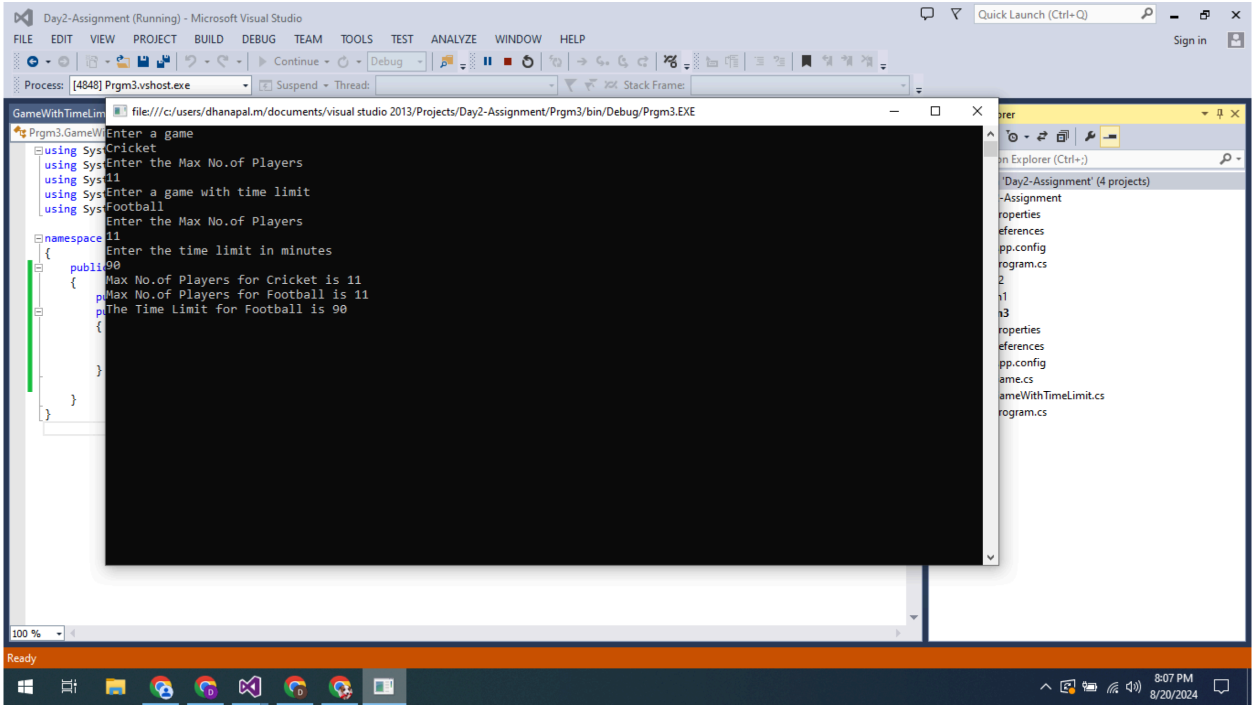
Game.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Prgm3
{
    public class Game
    {
        public string gamename { get; set; }
        public int maxplayers { get; set; }
        public override string ToString()
        {
            return "Max No.of Players for "+gamename+" is "+maxplayers;
        }
    }
}
```

GameWithTimeLimit.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Prgm3
{
  public class GameWithTimeLimit:Game
  {
    public int timelimit { get; set; }
    public override string ToString()
    {
      string baseclassout=base.ToString();
      return baseclassout +" \nThe Time Limit for " + base.gamename + " is " + timelimit;
    }

  }
}
```

Output :


Day2-Assignment (Running) - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM TOOLS TEST ANALYZE WINDOW HELP
Continue
Debug
Process: [4848] Prgm3.vshost.exe
Suspend
Thread:
Stack Frame:
Quick Launch (Ctrl+Q)
Sign in
file:///c:/users/dhanapal.m/documents/visual studio 2013/Projects/Day2-Assignment/Prgm3/bin/Debug/Prgm3.EXE
'Day2-Assignment' (4 projects)
ameWithTimeLimit.cs
100 %
Ready
8:07 PM
8/20/2024

```
Enter a game
Cricket
Enter the Max No.of Players
11
Enter a game with time limit
Football
Enter the Max No.of Players
11
Enter the time limit in minutes
90
Max No.of Players for Cricket is 11
Max No.of Players for Football is 11
The Time Limit for Football is 90
```