DEMO PROGRAMS

(Phase-I)

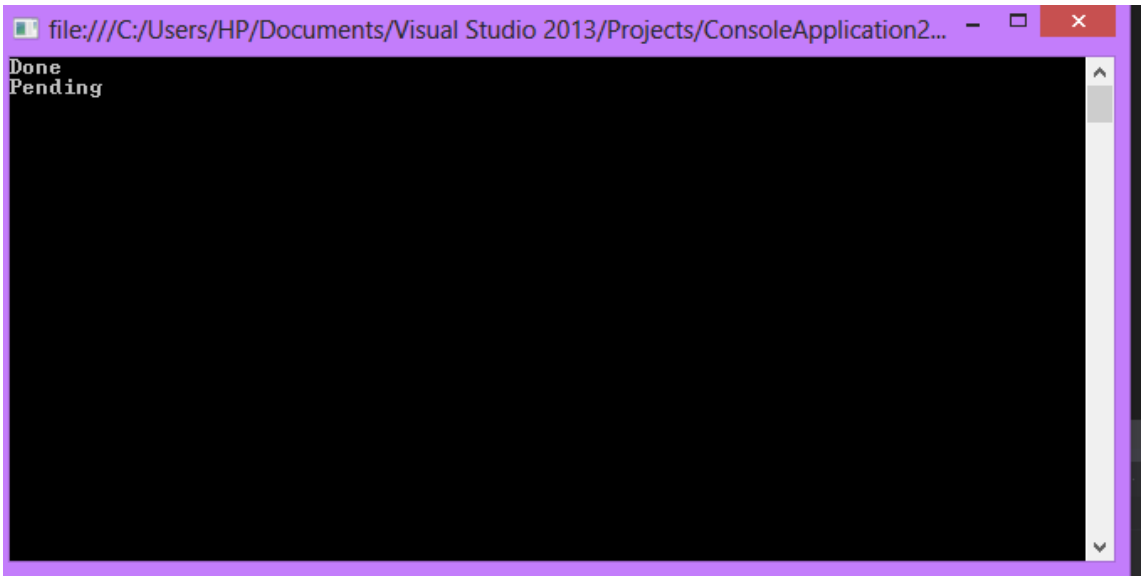
Demo

1. Namespace:

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using A = projA.teamA;
class Program
      {
         public static void Main(string[] args)
         {
             A::work.print();
             projA.teamB.work.print();
             Console.ReadLine();
              }
      }
namespace projA
{
   namespace teamA
   {
      class work
      {
         public static void print()
      {
         Console.WriteLine("Done");
      }
      }
   }
}
```

```
namespace projA
{
   namespace teamB
   {
      class work
      {
         public static void print()
         {
            Console.WriteLine("Pending");
         }
      }
   }
}
```

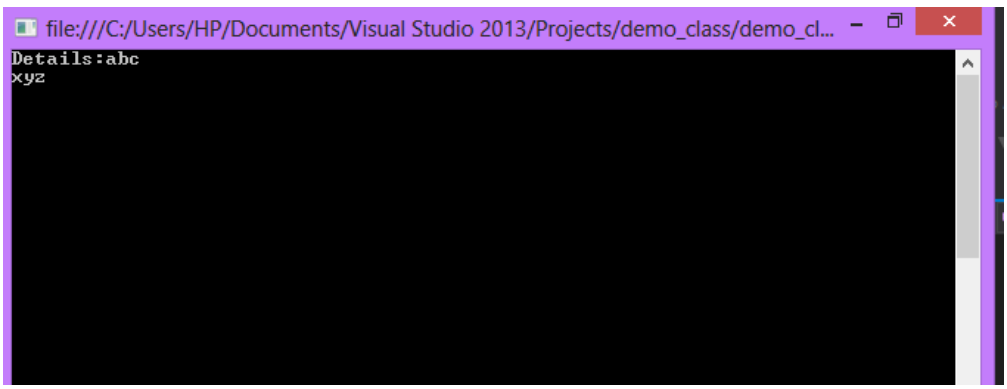
OUTPUT:



2. Class:

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

class student
{
   String name, college;

   public student(String n, String c)
   {
      this.name = n;
      this.college = c;
   }
   public void details()
   {
      Console.WriteLine("Details:{0}", name + "\n" +college);
       Console.ReadLine();
   }
}
namespace demo_class
{
   class Program
   {
      static void Main(string[] args)
      {
         student s1 = new student("abc", "xyz");
         s1.details();
      }
   }
}
```

OUTPUT:



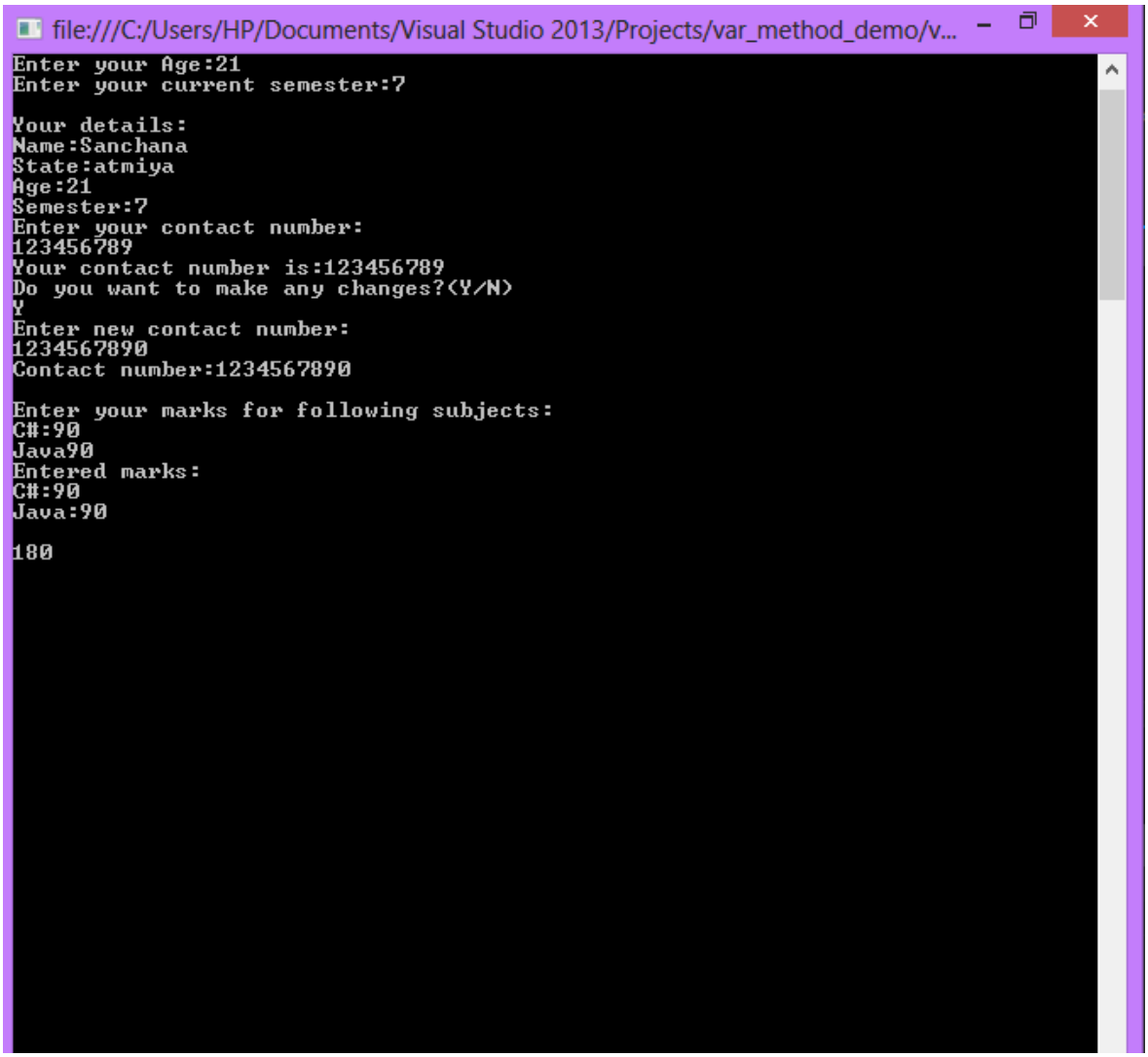
3. Variable & Methods:

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

namespace var_method_demo
{
   class Program
   {   // variable declaration
      string name, college;
      int age, sem;

      public void details()
      {
         Console.Write("Enter your name:");
         name = Console.ReadLine();

         Console.Write("Enter your college name:");
         college = Console.ReadLine();

         Console.Write("Enter your Age:");
         age = Convert.ToInt32(Console.ReadLine());

         Console.Write("Enter your current semester:");
         sem = Convert.ToInt32(Console.ReadLine());
      }

      public void display()
      {
         Console.WriteLine("\nYour details:");
         Console.WriteLine("Name:" + name);
         Console.WriteLine("State:" + college);
         Console.WriteLine("Age:" + age);
         Console.WriteLine("Semester:" + sem);
      }

      //call by ref
      public void number(ref int a)
      {
         Console.WriteLine("Contact number:" + a);
         Console.ReadLine();
          }

      // call by value
      public void marks(int s1, int s2)
      {
```

```
        Console.WriteLine("Entered marks:");
        Console.WriteLine("C#:" + s1 + "\nJava:" + s2);
        Console.ReadLine();
    }

    //return values in method
    public int sum(int x, int y)
    {
        return x + y;

    }

    static void Main(string[] args)
    {

        Program p = new Program();
        // method calling
        p.details();
        p.display();

        //----code for call by reference----
        char n;

        Console.WriteLine("Enter your contact number:");
        int b = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Your contact number is:" + b);
        Console.WriteLine("Do you want to make any changes?(Y/N)");

        n = Console.ReadKey().KeyChar;
        if (n == 'Y')
        {
            Console.WriteLine("\nEnter new contact number:");
            int v = Convert.ToInt32(Console.ReadLine());
            p.number(ref v); //calling by reference
        }
        else
        {
            Console.WriteLine("Please fill other details");
        }

        //----code for call by value----
        Console.WriteLine("Enter your marks for following subjects:");

        Console.Write("C#:");
        int sub1 = Convert.ToInt32(Console.ReadLine());

        Console.Write("Java");
        int sub2 = Convert.ToInt32(Console.ReadLine());
```

```
            p.marks(sub1, sub2); //calling by value
            Console.WriteLine( p.sum(sub1, sub2));//Return value method
            Console.ReadLine();
        }
    }
}
```

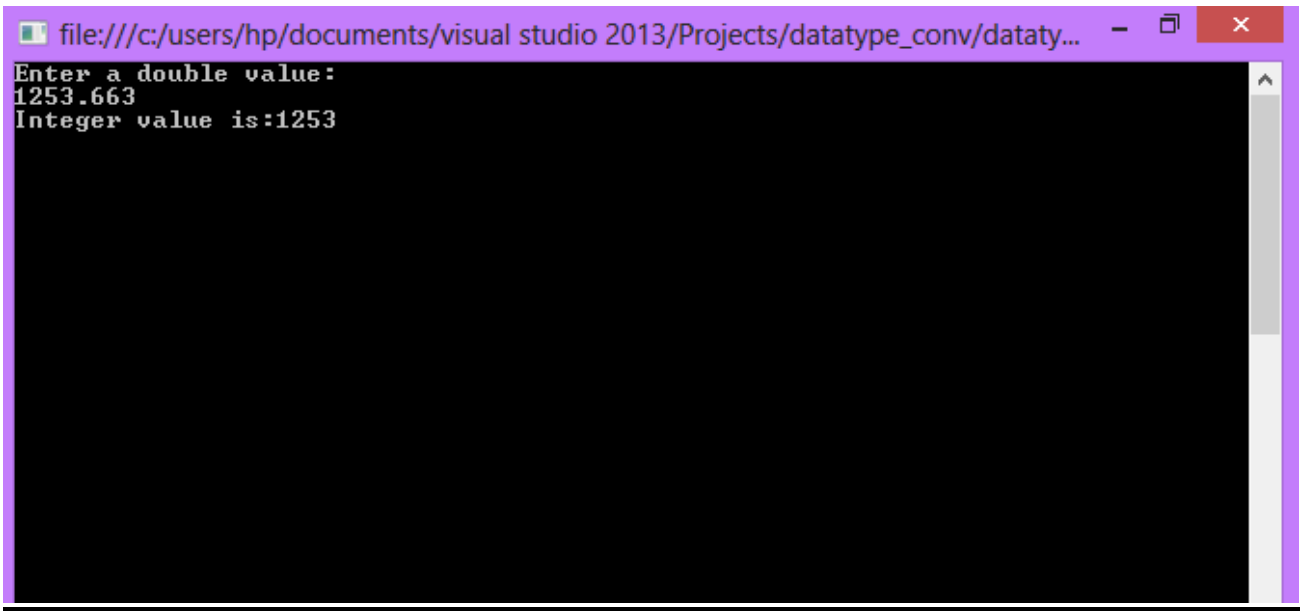
OUTPUT:



4. Datatype conversion:

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

namespace datatype_conv
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine("Enter a double value:");
         double d = Convert.ToDouble(Console.ReadLine());
         int i;

         // casting double to int.
         i = (int)d;
         Console.WriteLine("Integer value is:"+i);
         Console.ReadLine();
      }
   }
}
```

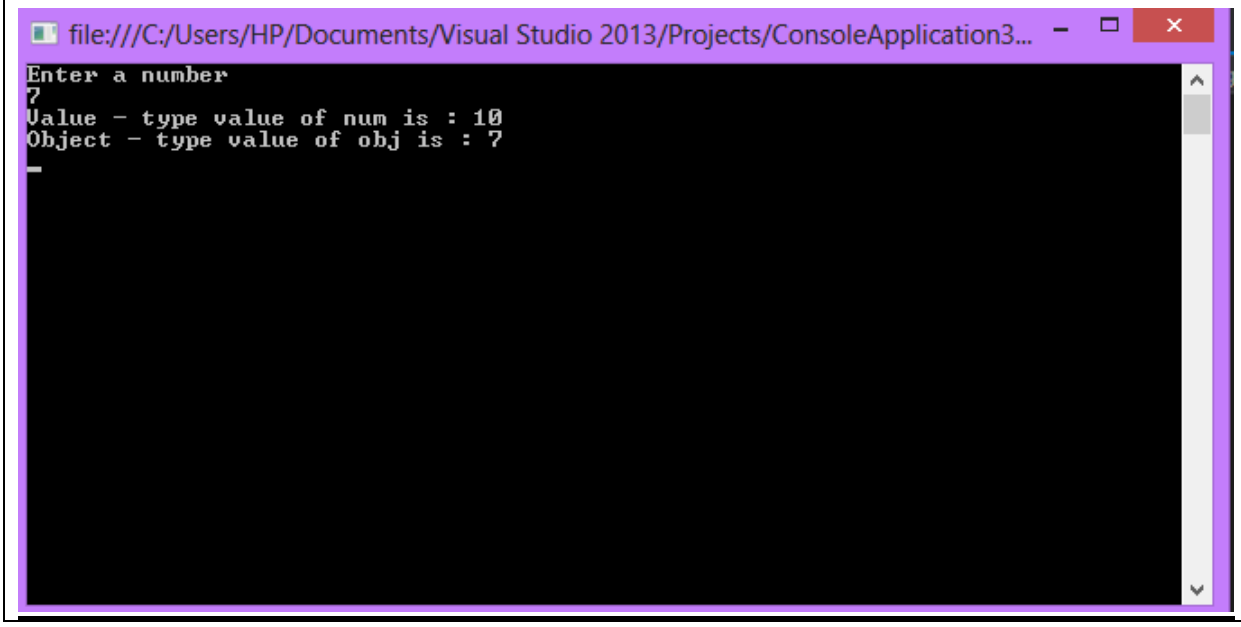
OUTPUT:



5. Boxing & Unboxing:

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

namespace boxing_unboxing
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine("Enter a number");
         int num = Convert.ToInt32(Console.ReadLine());
         object obj = num; //boxing

         num = 10;
         int i = (int)obj; //unboxing
         System.Console.WriteLine
         ("Value - type value of num is : {0}", num);
         System.Console.WriteLine
         ("Object - type value of obj is : {0}", obj);
         Console.ReadLine();

      }
   }
}
```

OUTPUT:



6. If/else,switch:

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

namespace if_else_switch
{
   class Program
   {
      public void eligibilty()
      {
         Console.WriteLine("Enter your age:");
         int age = Convert.ToInt32(Console.ReadLine());
         if(age >= 18){
            Console.WriteLine("You are eligible for vaccination");
         }
         else
         {
            Console.WriteLine("You are not eligible for vaccination");
         }

         Console.ReadLine();
      }

      public void vaccine()
      {
         Console.WriteLine("Enter name of the vaccine:");
         string v = Console.ReadLine();
         if(v == "covishield"){
             Console.WriteLine("Available");
         }
         else if (v == "covaxin")
         {
            Console.WriteLine("Available");
         }
         else if (v == "sputnik")
         {
            Console.WriteLine("Not Available");
         }
         Console.ReadLine();
      }
      static void Main(string[] args)
      {

         Program p = new Program();

         Console.WriteLine("Enter your choice:");
```

```
        Console.WriteLine("Enter 1 to check vaccine eligibilty:");
        Console.WriteLine("Enter 2 to check vaccine avalaibility:");
        int c = Convert.ToInt32(Console.ReadLine());
        switch (c)
        {
           case 1: p.eligibilty();
                   break;
           case 2: p.vaccine();
                   break;
           case 3: default:
                   break;

        }
     }
  }
        }
```

OUTPUT: