

# DEMO PROGRAMS

(Phase-I)

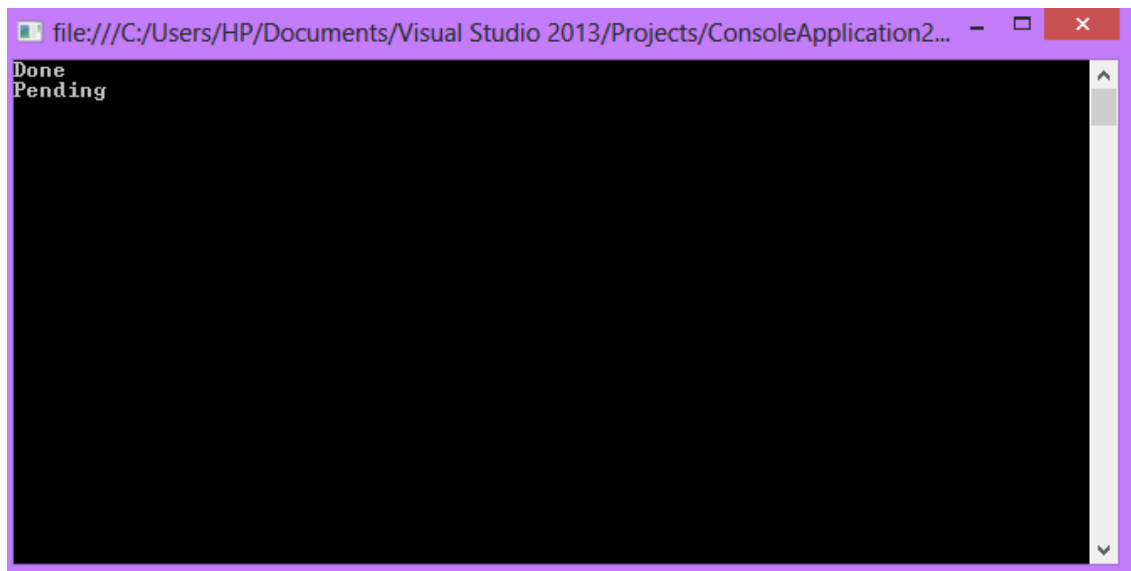
## Demo

### 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:**



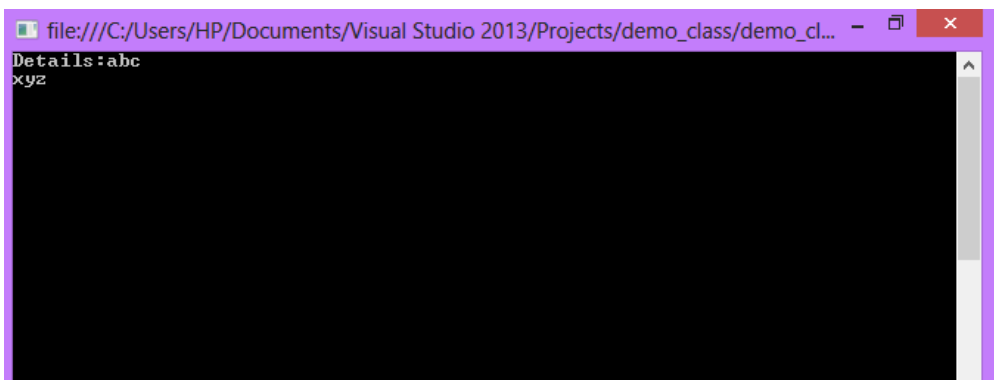
## 2. Class:

```
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:");

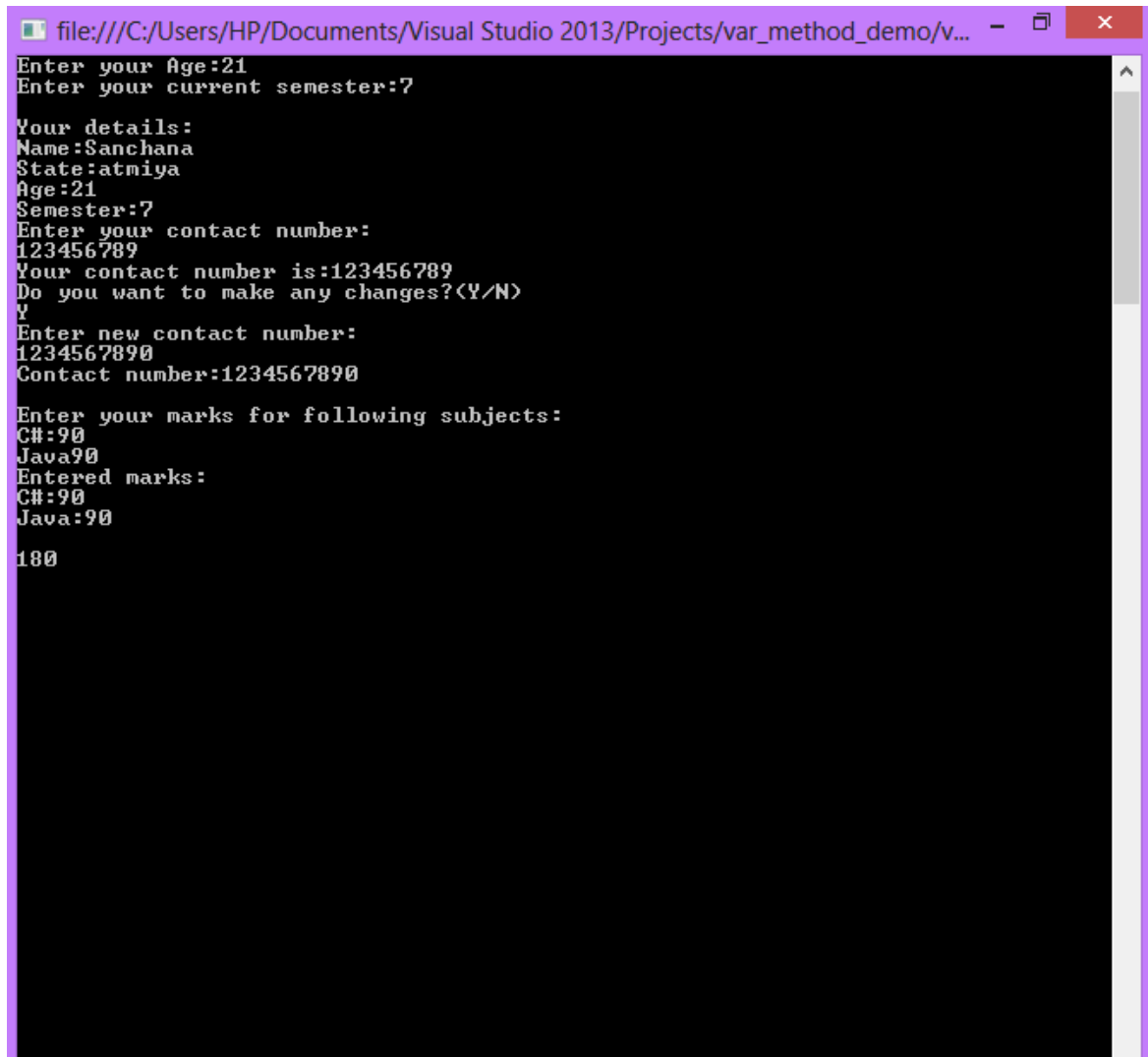
    Console.Write("C#:");
    int sub1 = Convert.ToInt32(Console.ReadLine());

    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:



```
file:///C:/Users/HP/Documents/Visual Studio 2013/Projects/var_method_demo/v...
Enter your Age:21
Enter your current semester:7

Your details:
Name:Sanchana
State:atmiya
Age:21
Semester:7
Enter your contact number:
123456789
Your contact number is:123456789
Do you want to make any changes?(Y/N)
Y
Enter new contact number:
1234567890
Contact number:1234567890

Enter your marks for following subjects:
C#:90
Java:90
Entered marks:
C#:90
Java:90
180
```

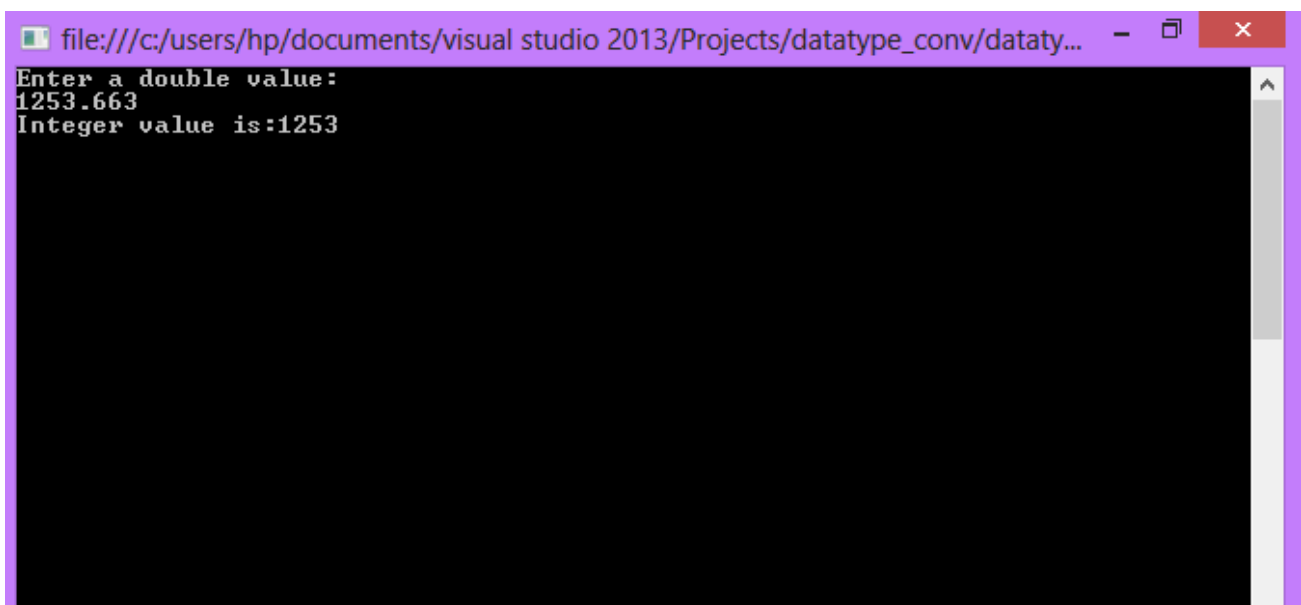
#### **4. Datatype conversion:**

```
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:**

A screenshot of a Windows console window with a purple title bar. The title bar text is "file:///c:/users/hp/documents/visual studio 2013/Projects/datatype\_conv/dataty...". The console output shows three lines: "Enter a double value:", "1253.663", and "Integer value is:1253". The text is white on a black background. The window has standard Windows controls (minimize, maximize, close) in the top right corner.

```
file:///c:/users/hp/documents/visual studio 2013/Projects/datatype_conv/dataty...
Enter a double value:
1253.663
Integer value is:1253
```



## 5. Boxing & Unboxing:

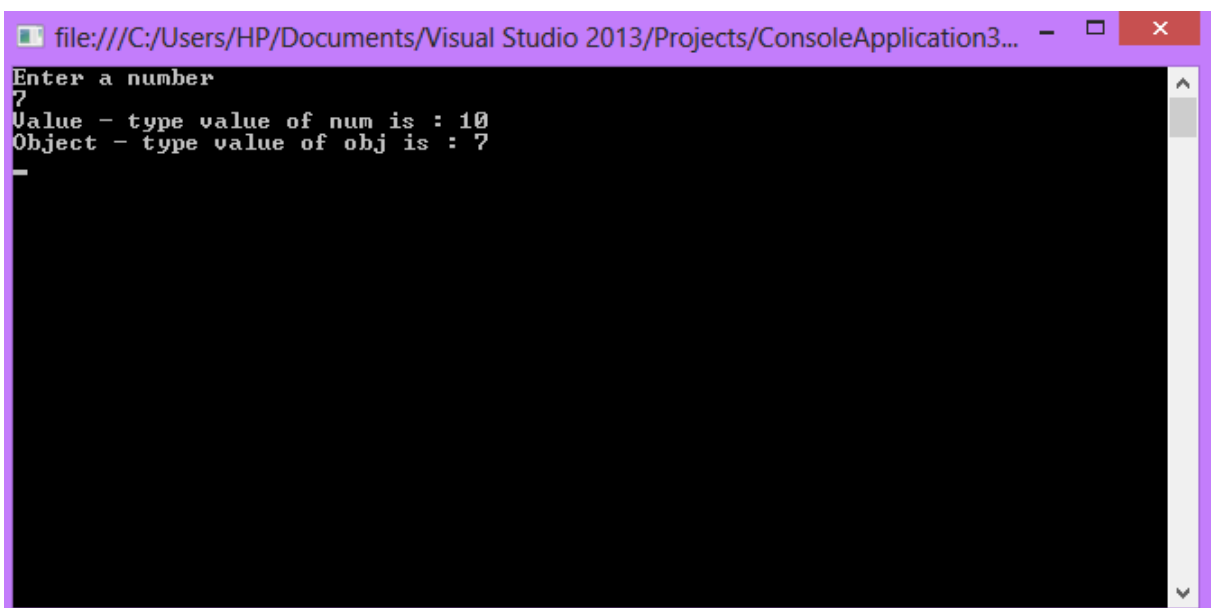
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

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:



The screenshot shows a console window titled "file:///C:/Users/HP/Documents/Visual Studio 2013/Projects/ConsoleApplication3...". The output text is as follows:

```
Enter a number
7
Value - type value of num is : 10
Object - type value of obj is : 7
```

## 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");
            }

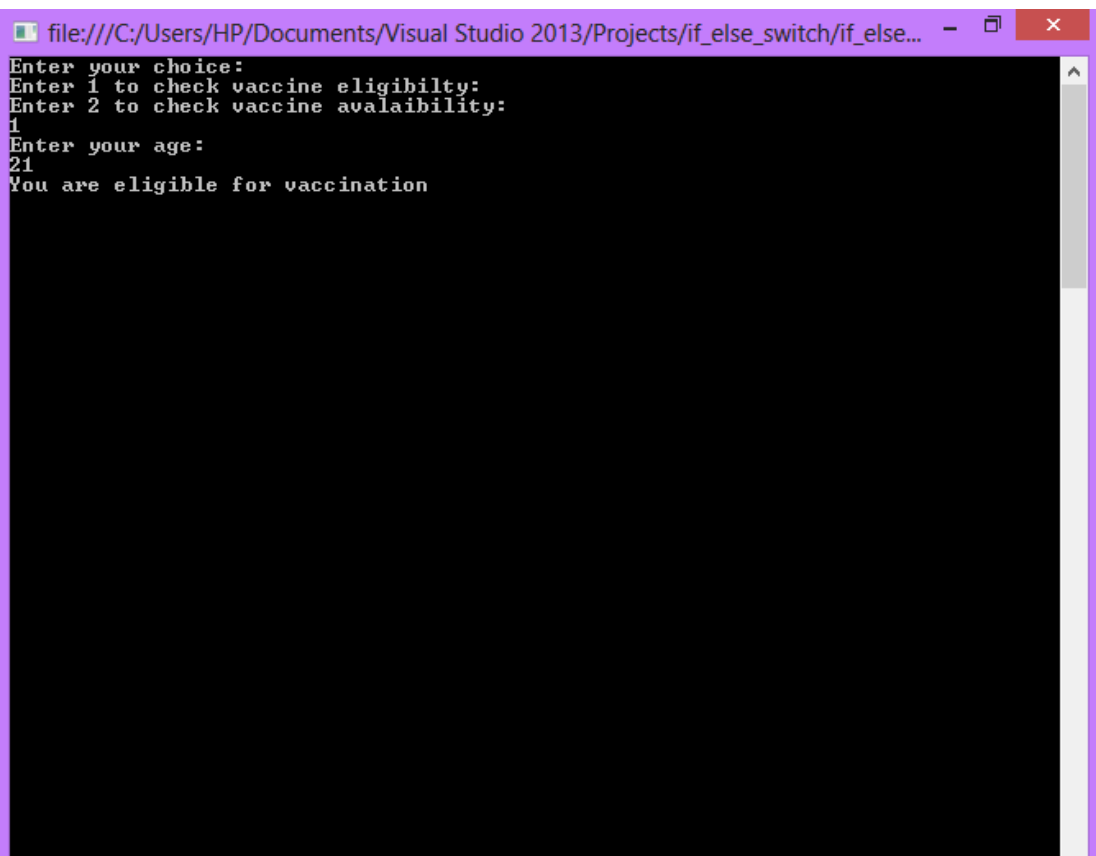
            Console.ReadLine();
        }

        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:**

A screenshot of a Visual Studio console window. The title bar shows the file path: file:///C:/Users/HP/Documents/Visual Studio 2013/Projects/if\_else\_switch/if\_else... The console output is as follows:

```
Enter your choice:
Enter 1 to check vaccine eligibilty:
Enter 2 to check vaccine avalaibility:
1
Enter your age:
21
You are eligible for vaccination
```

