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Practical Demos

Module – 1

Topics

1. **Create First C# Program "Hello World"**

   1.1 What is Namespace?

-

```
using System;
namespace Fintech
{
  class Fintech
  {
        public void loveFintech()
        {
              Console.WriteLine("I love Fintech");
        }
  }
}
using System; // Another Class/project
using Fintech
namespace Answer
{
  class Answer
  {
        static void Main(string[] args)
        {
              Fintech ft = new Fintech();
              ft.loveFintech();// displays “I Love Fintech”
        }
  }
}
```

1.2 What is class?

- Hello World Class Program

```
using System;
namespace HelloWorld
{
   class Hello {
      static void Main(string[] args)
      {
         Console.WriteLine("Hello World!");
      }
   }
}
```

1.3 Variable And Method Declaration

- using System

```
namespace sum
{
   class Summation
   {
            public int summing(int n)
      {
            int sum = 0;
            for (int i=1;i<n+1;i++)
            {
                  sum+=i;
            }
         return sum;
      }

      static void Main(string[] args)
      {
            Summation s = new Summation();
         Console.WriteLine("Sum is:{0}",s.summing(6));
      }
   }
}
```

```
// result is: Sum is 21
```

6. Understanding datatypes & variables with conversion

6.2 Datatype Conversion

- **Implicit Conversion**

```
using System;
namespace Casting{

class Implicit {

      // Main Method
      public static void Main(String []args)
      {
            int n= 24;
            long l = n;
            double d = l;

           Console.WriteLine("Int value "   +n);
           Console.WriteLine("Long value "   +l);
           Console.WriteLine("Float value "   +d);
      }
  }
}
// result is : Int Value : 24
                Long Value : 24
                Float Value : 24
```

- **Explicit Conversion**

```
using System;
namespace Casting{

class Explicit {

      // Main Method
      public static void Main(String []args)
      {
         float f = 765.12F;

         // Explicit Type Casting
         int n= (int)f;

         // Display Result
         Console.WriteLine("Value of n is " +n);
```

```
        }
    }
}

// result is : Value of n is 765
```

6.3 Boxing And Unboxing

```
using System;

class Converting {


    static public void Main()
    {
        int n = 38;
        // boxing
        object obj = num;


        // unboxing
        int n = (int)obj;


        // Display result
        Console.WriteLine("Value of ob object is : " + obj);
        Console.WriteLine("Value of n is : " + i);
    }
}


//result is : value of ob object is : 38
              Value of n is : 38
```

7. Understanding Decision making & statements

7.1 if…else

```
int i = 47, j = 47;

if (i > j)
{
   Console.WriteLine("i is greater than j");
}
else if (i < j)
{
   Console.WriteLine("i is less than j");
}
else
{
```

```
    Console.WriteLine("i is equal to j");
}
```
//result is: I is equal to j

7.2 Switch

```
int x =37;

switch (x % 2)
{
    case 0:
        Console.WriteLine($"{x} is an even value");
        break;
    default:
        Console.WriteLine($"{x} is an odd Value");
        break;
}
```

//result is : 37 is an odd value