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**KIT-118i.e**

**Course Name: Dot Net Technology**

**Report: Laboratory work #4**

**1.Theme: Processing StringBuilder**

## **1.Theory block**

This time we use StringBuilder.

## **2.Program block with screenshot**

```
using Lab1;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Lab4
{
    class Program
    {
        public static void Main(string[] arg)
        {
            var student = new StudentExtended();
            Console.WriteLine("Name: ");
            student.FirstName = Console.ReadLine();
            Console.WriteLine("LastName: ");
            student.LastName = Console.ReadLine();
            Console.WriteLine("PhoneNumber: ");
            student.PhoneNumber = int.Parse(Console.ReadLine());
            Console.WriteLine("Email: ");
            student.Email = Console.ReadLine();
            Console.WriteLine("Please Enter your Birthdate (exp 2020, 12,30)");
            DateTime inputtedDate = DateTime.Parse(Console.ReadLine());
            student.BirthDate = inputtedDate;
            Console.WriteLine("Please Enter Date of your admission(exp 2018, 09,30)");
            DateTime inputtedDate2 = DateTime.Parse(Console.ReadLine());
            student.Admission = inputtedDate2;
            Console.WriteLine("Plese Enter your faculty name");
            student.Faculty = Console.ReadLine();
            Console.WriteLine("Plese Enter your specialty number");
            student.Specialty_number = Console.ReadLine();
        }
    }
}
```

```

        Console.WriteLine(student.ToString());
        Console.ReadKey();
    }
}

public class StudentExtended:Student
{
    public DateTime BirthDate { get; set; }
    public DateTime Admission { get; set; }
    public string Faculty { get; set; }
    public string Specialty_number { get; set; }
    public int Age
    {
        get
        {
            var age = DateTime.Today.Year - BirthDate.Year;
            if (BirthDate.Date > DateTime.Today.AddYears(-age)) age--;
            return age;
        }
    }
    public int CourseNo
    {
        get
        {
            var courseNo = DateTime.Today.Year - Admission.Year;
            if (DateTime.Today.Month > 8) courseNo++;
            return courseNo;
        }
    }
    public int SemesterNO
    {
        get
        {
            var semesterNo = CourseNo * 2;
            if (DateTime.Today.Month > 8 || DateTime.Today.Month < 2) semesterNo--;
            return semesterNo;
        }
    }

    public string GroupNo
    {
        get
        {
            return $"{Faculty}{Specialty_number}{Admission.ToString("yy")}";
        }
    }
    public override string ToString()
    {
        var sb = new StringBuilder();
        sb.AppendLine($"Name: {FirstName} ");
        sb.AppendLine($"Lastname: {LastName} ");
        sb.AppendLine($"Phone: {PhoneNumber} ");
        sb.AppendLine($"Email: {Email} ");
        sb.AppendLine($"BirthDate: {BirthDate.ToString("yyyy,MM,dd")} ");
        sb.AppendLine($"Date of Admission: {Admission.ToString("yyyy,MM,dd")} ");
        sb.AppendLine($"Faculty:{Faculty} ");
        sb.AppendLine($"Specialty Number: {Specialty_number} ");
    }
}

```

```

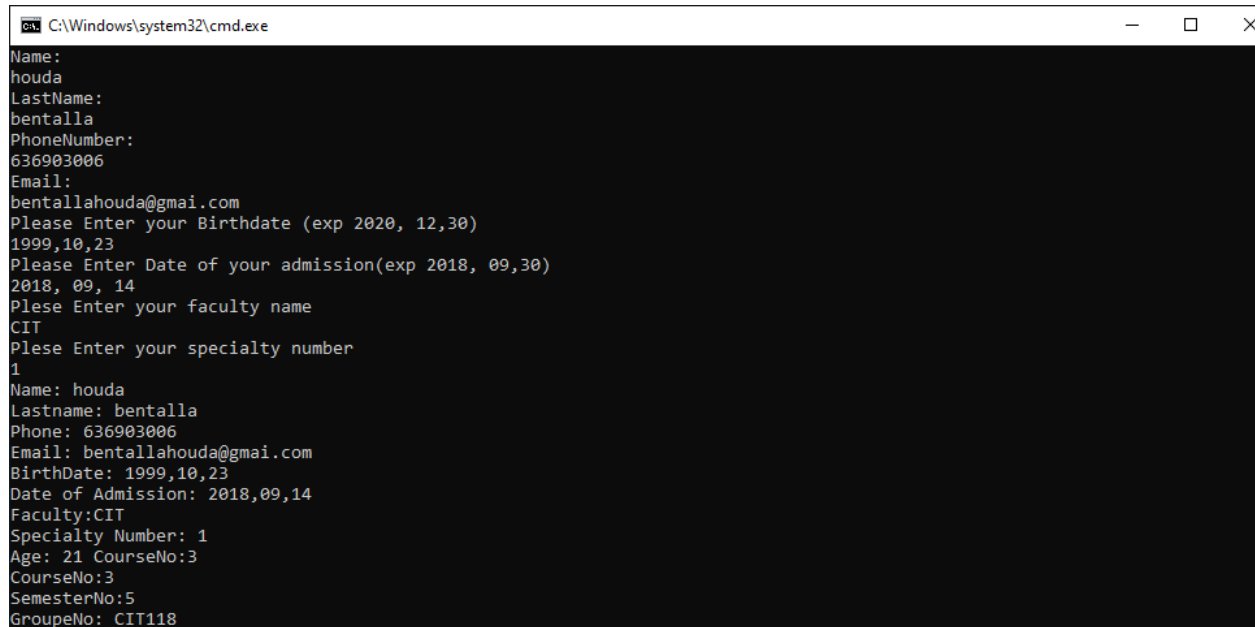
        sb.AppendLine($"Age: {Age} CourseNo:{CourseNo} ");
        sb.AppendLine($"CourseNo:{CourseNo} ");
        sb.AppendLine($"SemesterNo:{SemesterNO} ");
        sb.AppendLine($"GroupeNo: {GroupNo}");
        return sb.ToString();

        //return $"Name: {FirstName} Lastname: {LastName} Phone: {PhoneNumber} Email:
        {Email} BirthDate: {BirthDate.ToString("yyyy,MM,dd")}" Date of Admission:
        {Admition.ToString("yyyy,MM,dd")}" Faculty:{Faculty} Specialty Number: {Specialty_number}
        Age: {Age} CourseNo:{CourseNo} SemesterNo:{SemesterNO} GroupeNo: {GroupNo} ";

    }

}
}

```



```

C:\Windows\system32\cmd.exe
Name:
houda
LastName:
bentalla
PhoneNumber:
636903006
Email:
bentallahouda@gmail.com
Please Enter your Birthdate (exp 2020, 12,30)
1999,10,23
Please Enter Date of your admission(exp 2018, 09,30)
2018, 09, 14
Plese Enter your faculty name
CIT
Plese Enter your specialty number
1
Name: houda
Lastname: bentalla
Phone: 636903006
Email: bentallahouda@gmail.com
BirthDate: 1999,10,23
Date of Admission: 2018,09,14
Faculty:CIT
Specialty Number: 1
Age: 21 CourseNo:3
CourseNo:3
SemesterNo:5
GroupeNo: CIT118

```

### 3.Conclusion

This time we want to Know the group number of the student only from his given information.