

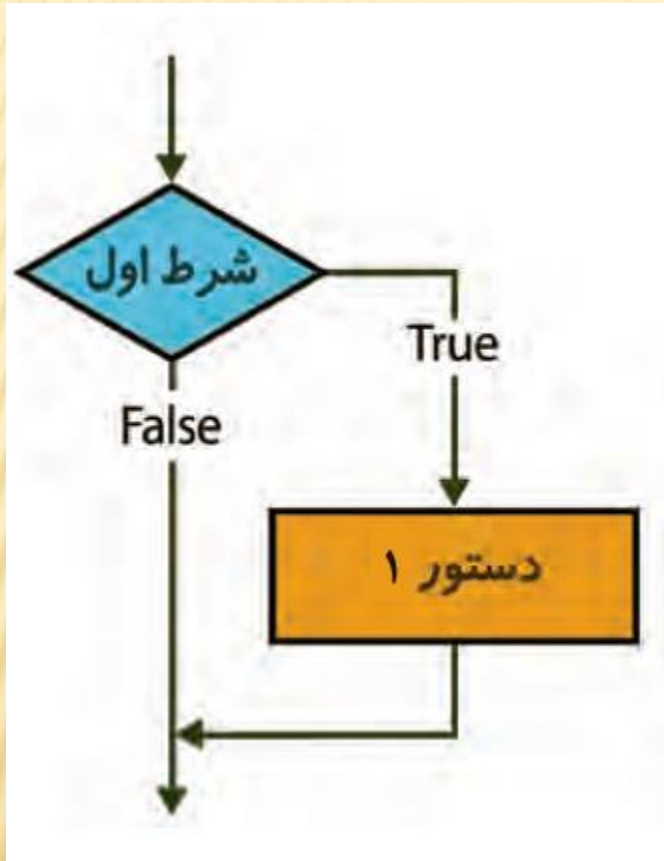
جلسه دوم مجازی

کنکور ۹۹

پودمان پنجم کتاب تولید محتوا و برنامه سازی پایه دهم

رشته شبکه و نرم افزار

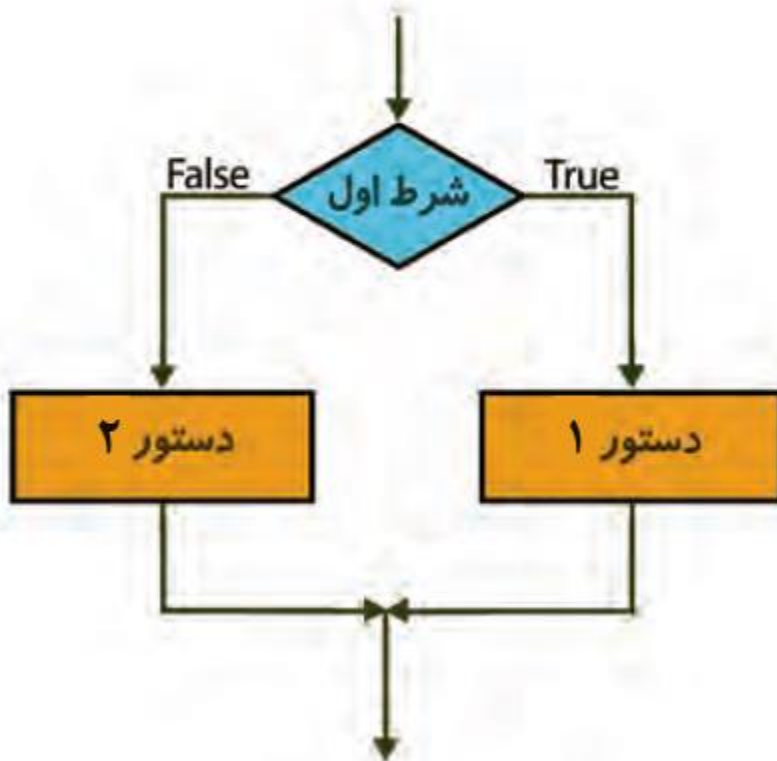
انواع دستور شرطی



```
if(condition)  
    instruction;
```

```
if(condition)  
{  
    instruction1  
    instruction2  
    .  
    .  
}
```

انواع دستور شرطی

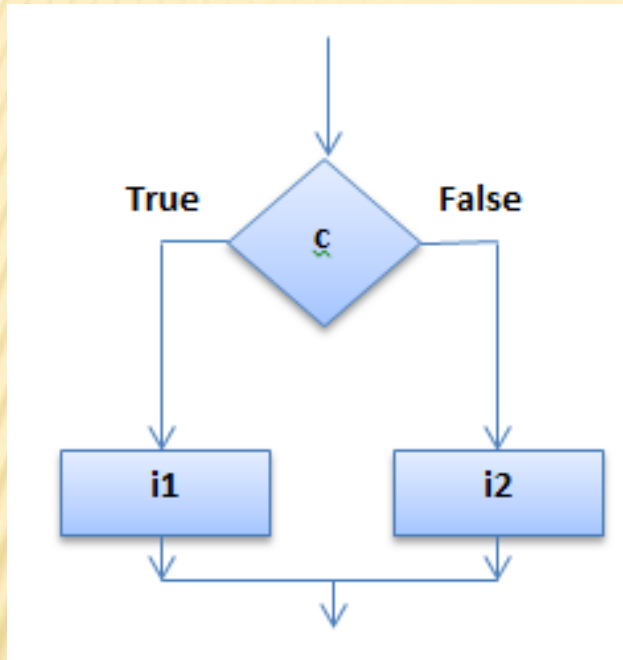


```
if(condition)
    instruction1;
else
    instruction2;
```

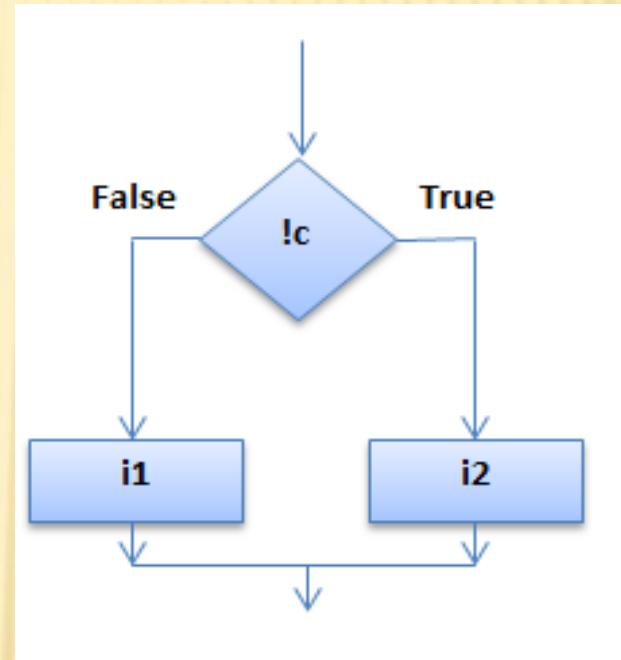
```
if(condition)
{
    instruction1
    instruction2
    .
    .
}
else
{
    .
    .
}
```

```
bool x = false;  
int y = 5;  
if (x = true) ++y;  
if (x) ++y;  
if(x==true) ++y;  
if (!x) ++y;  
if (!!x) y++;  
Console.WriteLine(y);
```

تکنیک جابجایی مسیر ها در شرط

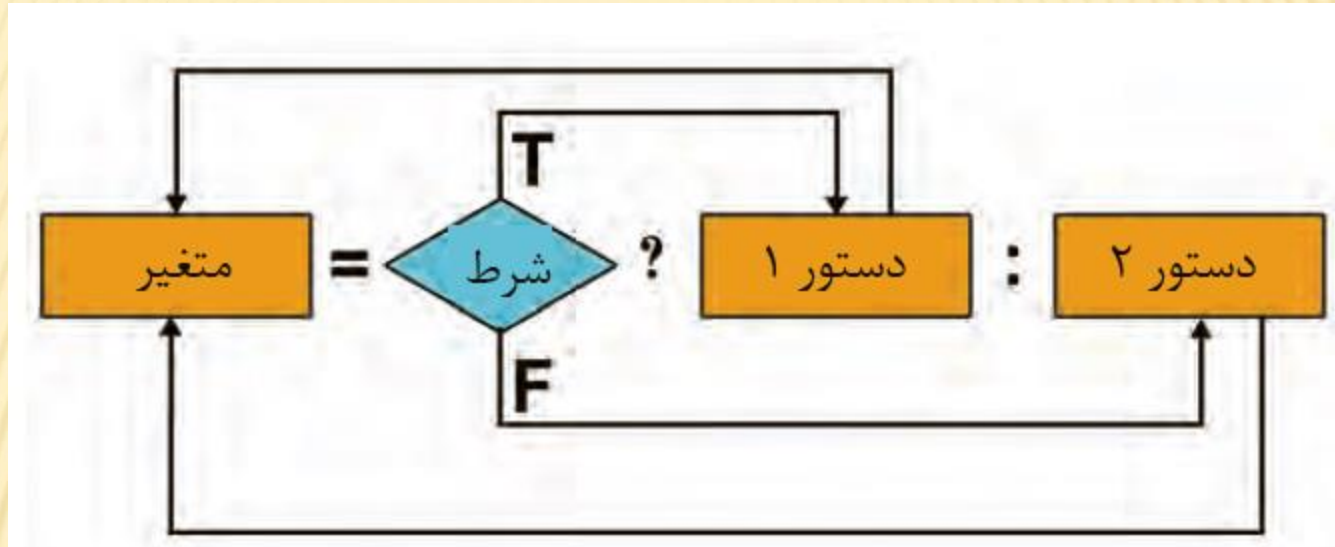


```
if(c )  
    i1;  
else  
    i2;
```



```
if(!c )  
    i2;  
else  
    i1;
```

عملگر سه تایی



```
if(condition)  
    variable=expression1;  
else  
    variable=expression2;
```

```
variable=condition?expression1:expression2
```

```
Console.WriteLine(2==1+1?2==3-2?7:8:2==5-3?9:10);
```

```
Console.WriteLine(1==1?2==2?3==3?3:4:5:6);
```

FORMAT EXCEPTION خطای

```
int x = int.Parse(Console.ReadLine());
```

Microsoft Visual Studio Express 2012 for Windows Desktop



An unhandled exception of type 'System.FormatException' occurred in mscorlib.dll

Additional information: Input string was not in a correct format.

F5 start debugging

CA.

C:\Windows\system32\cmd.exe

mina

Unhandled Exception: System.FormatException: Input string was not in a correct format.

at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer& number, NumberFormatInfo info, Boolean parseDecimal)

at System.Number.ParseInt32(String s, NumberStyles style, NumberFormatInfo info)

at System.Int32.Parse(String s)

at T1.Program.Main(String[] args) in c:\Users\Education\Documents\Visual Studio 2012\Projects\T1\T1\Program.cs:line 13

Press any key to continue . . . _

Ctrl+F5 start without debugging

FORMAT EXCEPTION خطای

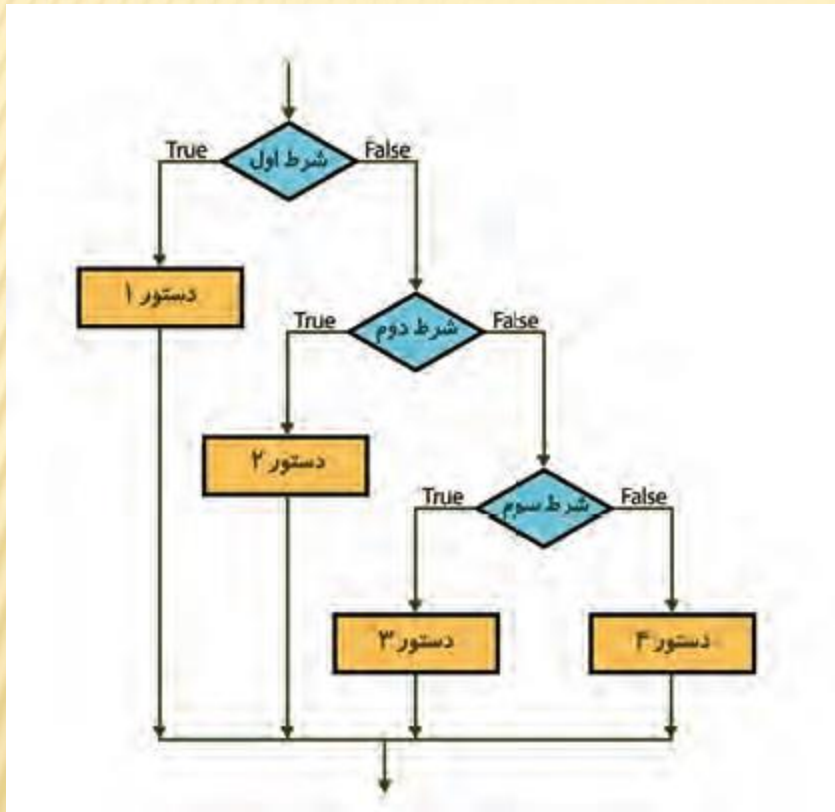
```
int x;  
if (int.TryParse(Console.ReadLine(), out x))  
    Console.WriteLine(x);
```

```
int x;  
if (int.TryParse(Console.ReadLine(), out x)) ;  
Console.WriteLine(x);
```

```
Console.WriteLine (" How old are you");  
bool result = int.TryParse (Console.ReadLine() , out int age);  
if (result)  
{  
    string s = (age >= 18 ? "Allowed" : "Not Allowed");  
    Console.WriteLine (s);  
}
```

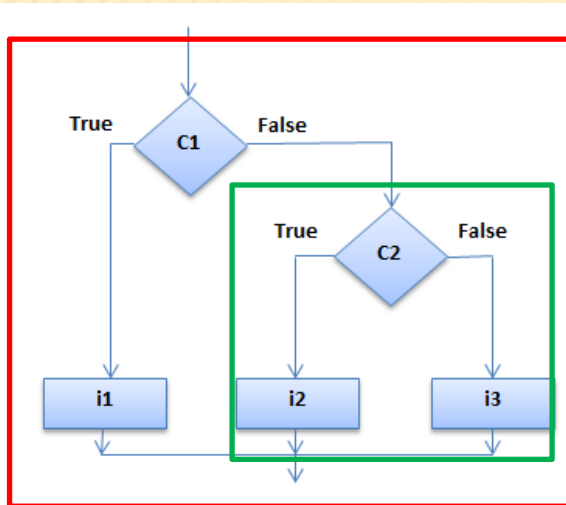
کد کتاب

NESTED IF



```
if(c1)
    i1;
else if(c2)
    i2;
else if(c3)
    i3;
else
    i4;
```

NESTED IF



```
if(c1)
```

```
    i1;
```

```
else
```

```
    if(c2)
```

```
        i2;
```

```
    else
```

```
        i3;
```

```
if(c1)
```

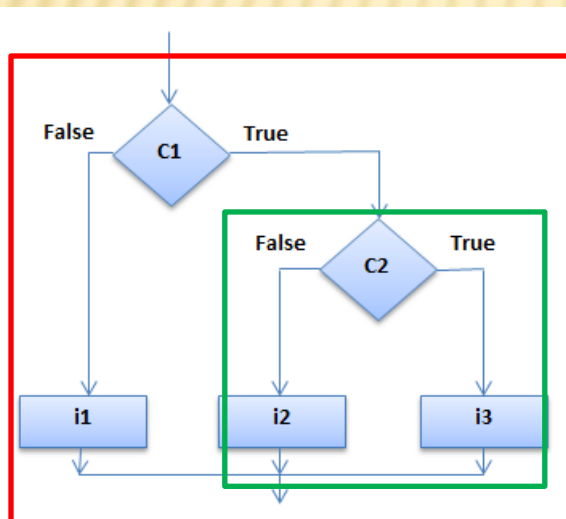
```
    i1;
```

```
else if(c2)
```

```
    i2;
```

```
else
```

```
    i3;
```



```
if(c1)
```

```
    if(c2)
```

```
        i3;
```

```
    else
```

```
        i2;
```

```
else
```

```
    i1;
```

```
if(!c1)
```

```
    i1;
```

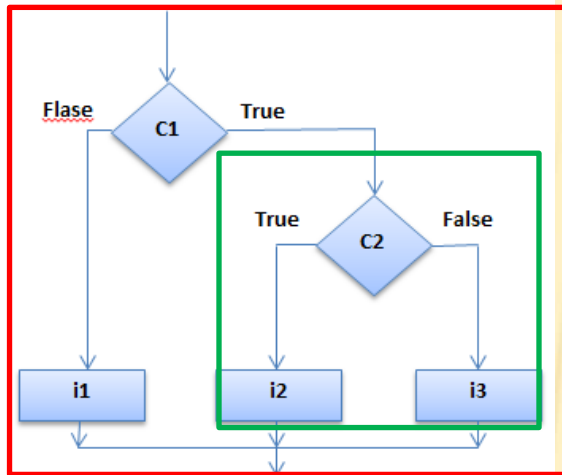
```
else if(!c2)
```

```
    i2;
```

```
else
```

```
    i3;
```

NESTED IF



```
if(c1)
```

```
    if(c2)
```

```
        i2;
```

```
    else
```

```
        i3;
```

```
Else
```

```
    i1;
```

```
if(!c1)
```

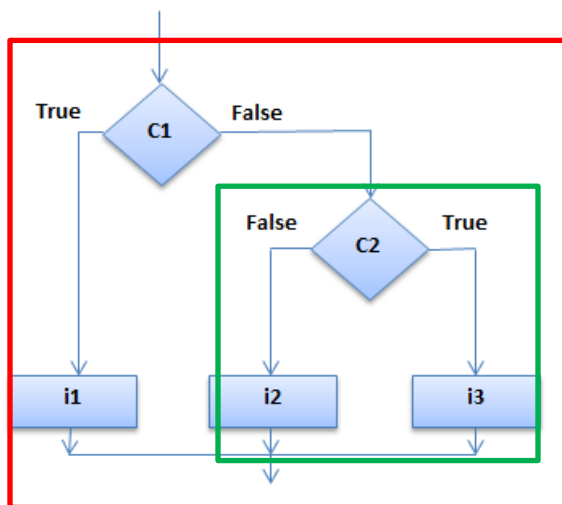
```
    i1;
```

```
else if(c2)
```

```
    i2;
```

```
else
```

```
    i3;
```



```
if(c1)
```

```
    i1;
```

```
else
```

```
    if(c2)
```

```
        i3;
```

```
    else
```

```
        i2;
```

```
if(c1)
```

```
    i1;
```

```
else if(!c2)
```

```
    i2;
```

```
else
```

```
    i3;
```

ساده سازی شرط با عملگر منطقی

```
if (temp > 19)
    if (condition == "sunny")
        Console.WriteLine("Excellent");
```

```
if ((temp > 19) && (condition == "sunny"))
    Console.WriteLine("Excellent");
```

```
if (temp < 19)
{
    if (condition == "sunny")
        Console.WriteLine("suitable");
    if (condition == "partly cloudy ")
        Console.WriteLine("suitable");
}
```

?

```
int x = 5;  
if (x > 3) ++x;  
if (x < 7) ++x;  
Console.WriteLine(x);
```

```
int x = 5;  
if (x > 3 || x < 7) ++x;  
Console.WriteLine(x);
```



SWITCH

```
string season = Console.ReadLine();  
if (season == "Spring")  
    Console.WriteLine("March, April, May");  
else if (season == "Summer" )  
    Console.WriteLine("June, July, August");  
else if (season == "Autumn")  
    Console.WriteLine("September, October, November");  
else if (season == "Winter")  
    Console.WriteLine("December, January, February");  
else  
    Console.WriteLine("Season Wrong");
```

SWITCH

```
string season = Console.ReadLine();
switch (season)
{
    case "Spring":
        Console.WriteLine("March, April, May");
        break;
    case "Summer":
        Console.WriteLine("June, July, August");
        break;
    case "Autumn":
        Console.WriteLine("September, October, November");
        break;
    case "Winter":
        Console.WriteLine("December, January, February");
        break;
    default:
        Console.WriteLine("Season Wrong");
        break;
}
```

SWITCH

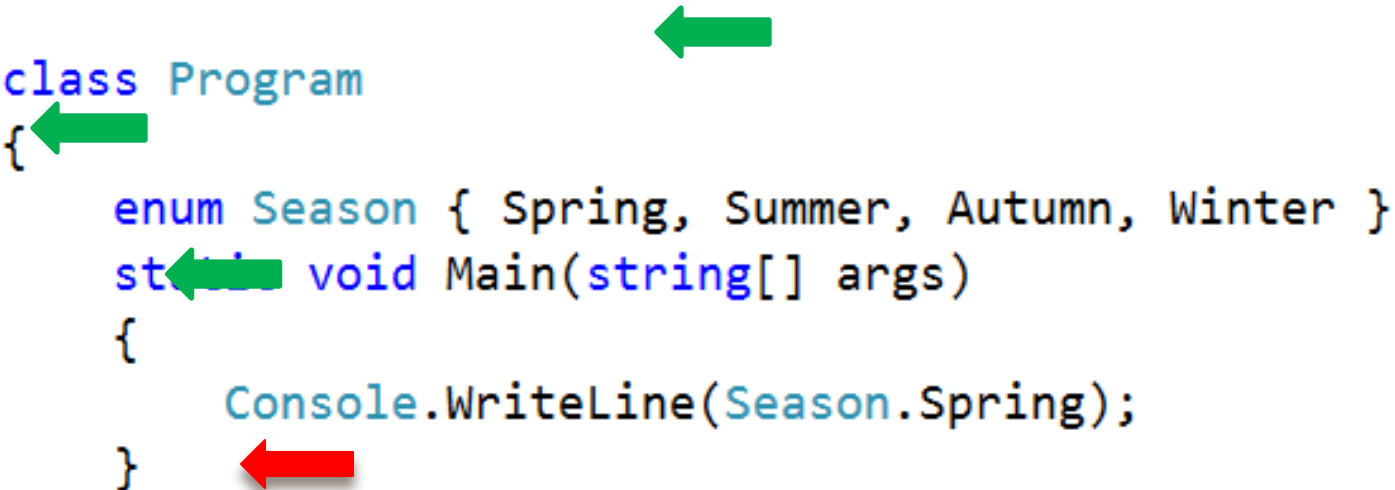
```
switch (season)
{
    case "March":
    case "April":
    case "May":
        Console.WriteLine("Spring");
        break;
    case "June":
    case "July":
    case "August":
        Console.WriteLine("Summer");
        break;
    case "September":
    case "October":
    case "November":
        Console.WriteLine("Autumn");
        break;
    case "December":
    case "January":
    case "February":
        Console.WriteLine("Winter");
        break;
    default:
        Console.WriteLine("Month Wrong");
        break;
}
```

SWITCH

- ✗ نوع داده در switch باید char، integral، string، bool و enum باشد.
- ✗ دستور default الزامی نیست.
- ✗ دستور break الزامی است مگر case بدون دستور باشد.
- ✗ Nested if می تواند جایگزین switch شود.

ENUM

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace T1
{
    class Program
    {
        enum Season { Spring, Summer, Autumn, Winter }
        static void Main(string[] args)
        {
            Console.WriteLine(Season.Spring);
        }
    }
}
```



```
enum Season { Spring=1, Summer=2, Autumn=3, Winter=4 }
```

```
enum Season { Spring=1, Summer, Autumn, Winter}
```

از توجه شما متشکرم

عبداله صارمی نائینی
اردیبهشت ۱۳۹۹