

High-Level Language Comparison

Python	Visual Basic	C#
Variable declaration and assignment		
<pre>num = 12</pre>	<pre>Dim num As Integer = 12</pre>	<pre>int num = 12;</pre>
Input and output		
<pre>name = input("Enter your name: ") print("Hello", name)</pre>	<pre>Console.WriteLine("Enter your name: ") Dim name As String = Console.ReadLine() Console.WriteLine("Hello " + name)</pre>	<pre>Console.WriteLine("Enter your name: "); String name = Console.ReadLine(); Console.WriteLine("Hello " + name);</pre>
Selection		
<pre>time = 22 if time < 10: print("Good morning.") elif time < 20: print("Good day.") else: print("Good evening.")</pre>	<pre>Dim time As Integer = 22 If time < 10 Then Console.WriteLine("Good morning.") ElseIf time < 20 Then Console.WriteLine("Good day.") Else Console.WriteLine("Good evening.") End If</pre>	<pre>int time = 22; if (time < 10) { Console.WriteLine("Good morning."); } else if (time < 20) { Console.WriteLine("Good day."); } else { Console.WriteLine("Good evening."); }</pre>

Python

Visual Basic

C#

Definite iteration

```
for i in range (0, 5):
    print(i)
```

```
For i As Integer = 0 To 4
    Console.WriteLine(i)
Next
```

```
for (int i = 0; i < 5; i++)
{
    Console.WriteLine(i);
}
```

Indefinite iteration

```
i = 0
while i < 5:
    print(i)
    i += 1
```

```
Dim i As Integer
While i < 5
    Console.WriteLine(i)
    i += 1
End While
```

```
int i = 0;
while (i < 5)
{
    Console.WriteLine(i);
    i++;
}
```

Random numbers

```
import random
myNum = random.randint(1, 7)
```

```
Dim r As New Random
Dim myNum As Integer = r.Next(1, 6)
```

```
Random r = new Random();
Int myNum = r.Next();
```

Subroutines

```
def SayHello():
    print("Hello!")
```

```
Sub SayHello()
    Console.WriteLine("Hello!")
End Sub
```

```
static void SayHello()
{
    Console.WriteLine("Hello!");
}
```