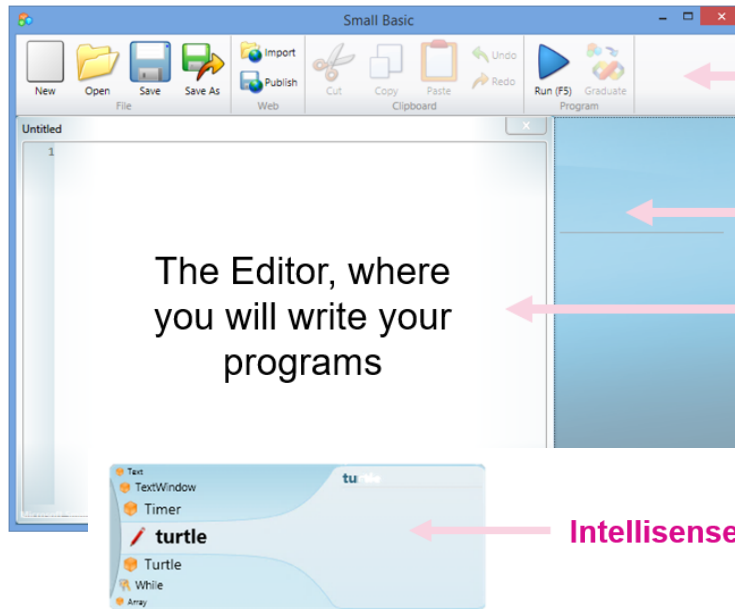
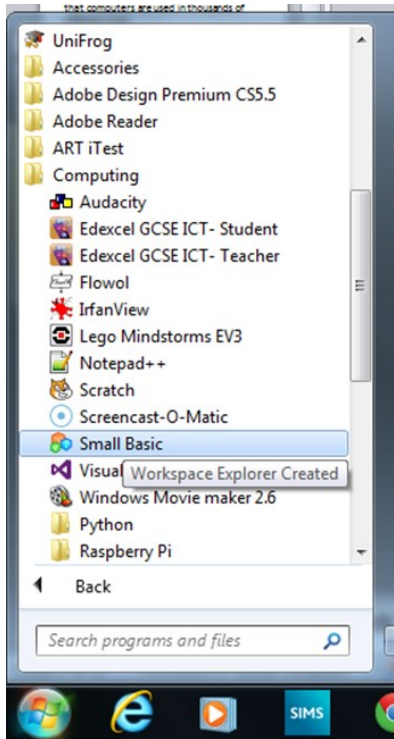


Computing



Toolbar

Help

Editor

Intellisense

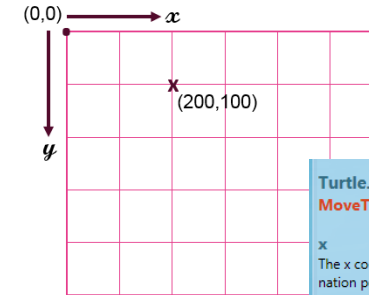
Variable
A piece of information you want the computer program to remember

Code examples

- `Turtle.PenUp()` *'so line will not be drawn*
- `Turtle.MoveTo(100,100)` *'move the turtle*
- `Turtle.Angle=90` *'make turtle face right*
- `Turtle.PenDown()` *'put pen down*
- `Turtle.turn(90)` *'turns the turtle by 90°*

Co-ordinates

The Graphics screen has x and y coordinates



Turtle.
MoveTo(x, y)
 x
The x co-ordinate of the destination point.
 y
The y co-ordinate of the destination point.

`Turtle.MoveTo(400,200)`

Programming constructs

Sequencing



Creating a set of instructions to complete a task. The order of the instructions is vital to creating a successful algorithm.

Selection



A decision within a computer program when the program decides to move on based on the results of an event e.g. IF, ELIF, ELSE

Iteration



Repeating an action. This could be a WHILE loop (do something while a condition is met) or a FOR loop (do something a set number of times).

Computing

Code examples

```
GraphicsWindow.Penwidth=5
```

```
GraphicsWindow.PenColor= "Red"
```

```
GraphicsWindow.PenColor=GraphicsWindow.GetRandomColor()
```

For Loop– fixed number of repetitions

i is a counter. It counts the number of times the instructions in the loop are to

```
be For i = 1 To 4  
Turtle.Move(100)  
Turtle.TurnRight()  
EndFor
```

Variable

A piece of information you want the computer program to remember

```
Textwindow.WriteLine("What's your name?")  
Name = TextWindow.Read()  
Textwindow.WriteLine("Hello, "+Name)
```








While Loop– repeats until a condition is met

The number will be printed on the screen in this scenario while it is less than or equals to 10

```
While number <= 10  
TextWindow.WriteLine(number)  
number=number+1  
EndWhile
```

Selection– allows different things to happen based on whether a condition is met or not

```
TextWindow.WriteLine("how are you happy?")  
answer=TextWindow.Read()  
If (answer="yes") Then  
TextWindow.WriteLine("im glad that your feeling happy")  
Else  
TextWindow.WriteLine("im sorry you arent feeling happy, is there anything i can do to help")  
EndIf
```

Shape	Name	No of sides	Angle
	Triangle	3	120°
	Square	4	90°
	Pentagon	5	72°
	Hexagon	6	60°
	Octagon	8	45°
	Nonagon	9	40°
	Decagon	10	36°

