

Narration	Time
.V 2Ši	00.01
.i wL l»\ M~ b lk k l 6 Control Execution ~KTurtle	00.03
.DZ ë~ sgäkl	00.10
gzl\B'while'	00.13
\B'for'	00.15
0.8.1 yjgzKTurtle gzl12.04 yjgzOS ø 8~0 nÆä™eg kÄb lk k l .Vf „ g™wE l» (beta)g	00.17
.•] â¥~ŠãÄx»ÆKTurtle Ä\WZÖ• °™yâtë	00.32
.B Šhttp://spoken-tutorial.org V, dz~gønÆ, g lk ˘ Ä 7x l	00.38
.BÄ EFG KTurtle *q l	00.45
.,™Ä6 Dash home	00.48
.,™U KTurtle ~glau	00.50
.i • EFG KTurtle ,™Ä6 option	00.53
.i H control execution ŽVfCCE~ ¬	00.59
.i @™wzNÄãlzgÄxl 6 Control execution	01.05
.• CfwE lø†, Z nÆä™wzNÄ program execution	01.10
.Cf 7ãx, ðÄJZ>0i ušq l»ÄxYdÄ lz äY} CŠg!- g!Loop	01.16
.\B"for" gzl\B"while" †	01.25
.,™qÄb lkB,Æ\B"while"	01.30
.i m\$ 7 ~ boolean' false 'JZ>i , g!g!JÄeÄ~ \B"while"	01.34

.VfCCEĀ, Å\β"while" ~	01.42
while loop condition { do something with loop increment variable}	
.i eĀ, Ð ~ text editor k0} ÷	01.56
.VfC TM ~ KTurtle editor A TM 8»xŁ6Ð text editor ~	01.59
., TM U~ KTurtle editor L ĀxŁ6gzl, Šuzg bġkVĒā!\$[02.07
., TM qĀ{g!šġk^ Aä TM UxŁ6	02.13
.i YfĀ@šzhā0VfC TM xziĀĀ xŁ6 ~	02.18
.VfCCEĀ~ [l	02.25
.i @ ^M iH ² Āi Āè^ AekŁ# #	02.27
.f;gf ygxŁ6Z>0if 7 executeĭ Āt0 ^a	02.32
.i C TM gH~ ; 7«deĀ Turtle &¾ reset	02.38
.i @ ^M gšzero =z0' l»xyġk 0\$ x = 0	02.43
"&¾" message "i Šcš ~] ā FĀ. e:~ xŁ6^ Akeyword message "	02.52
.i g6gĭA2yĀ string "	
.i @ ^M C ^{a3/4} l√ ^le\l- \0qġñfD TM i ĩĀ Ðstring t	03.04
.i @ ^M S> xĀĤ "while" 0while \$ x <30	03.11
.i @ ^M TŸl»3 ~ =zĀyġk x 0\$ x = \$ x +3	03.17
.i @ ^M gH>, ~Ā{" WE ÐS ŠĀ&¾ print 0fontsize 15	03.27
.i @ ^M Ā~ pixels 0i @šZ®6gĭA2yĀ Fontsize	03.35
.i eš] iYĀäYÐMø 20 6kŁOĀ "Turtle" 0forward 20	03.42
.i @ ^M C ^a =zĀyġkx 6kŁO print \$ x	03.52
., TM Ā6ĀA"Run" nĀä TM ygĀxŁ6	04.01

., $\text{TM} \text{A6 OK Xi } @f \setminus l - \setminus 0^{3/4}! \vee \wedge \text{le} : \text{q} \uparrow$	04.05
.i $@f \text{C}^a \text{6k} \uparrow \text{OJ} \uparrow 30 \text{D} \uparrow 3 [\text{C} \gg 3$	04.11
.i $k(\text{D} \uparrow \text{M} \uparrow \text{O} \uparrow \text{P} \uparrow 20 \text{6kO} \text{"Turtle"}$	04.17
. • $\text{D}^{\text{TM}} \times \gg \text{B}, \text{A} \setminus \beta \text{"for" } \text{D} \uparrow \text{M}$	04.22
.i $\setminus \beta \text{e} \uparrow \text{z} \gg \text{q} \uparrow \setminus \beta \text{"for"}$	04.26
.i $@f \text{executee} \uparrow \text{V} \uparrow \text{oo} \uparrow \text{C} \sim \setminus \beta \text{"for"}$	04.29
.J $\hat{\text{I}} \text{J} = \text{z} \sim \text{y} \text{WE} \text{K} \uparrow \text{O} \uparrow \text{i} \text{CYf} \xi = \text{z} \uparrow \text{A} \uparrow \text{O} \uparrow \text{kz}$	04.34
.Vf $\text{CCE} \uparrow \text{L} \uparrow \text{, } \text{A} \setminus \beta \text{"for" } \sim [\text{L}$	04.41
(Statement)for variable = start number to end number	04.46
.Vf $\text{CU} \uparrow \text{A} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6} \{ \text{S} \uparrow \text{Z} \uparrow \text{n} \sim [\text{L}$	04.55
.Vf $\text{C}^{\text{TM}} \text{yg} \text{n} \uparrow \text{A} \uparrow \text{e} \uparrow \text{a} \uparrow \text{TM} \text{S} \uparrow \text{TM} \uparrow \text{A} \uparrow \text{k} \uparrow \text{O} \uparrow \text{gz} \uparrow \text{O} \uparrow \text{Vf} \text{C}^{\text{TM}} \text{UN} \uparrow \& \uparrow 3/4 \text{clear } \sim$	04.59
.Vf $\text{C}^{\text{TM} \circ} \sim \text{KTurtle editor } \hat{\text{V}} \uparrow \text{E} \uparrow \text{TM} \uparrow 8 \gg \text{x} \uparrow \text{z} \uparrow \text{6} \uparrow \text{D} \uparrow \text{text editor } \sim [\text{L}$	05.05
., $\text{TM} \text{UN} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6} \sim \text{KTurtle editor } \text{L} \uparrow \text{gz} \uparrow \text{L}, \text{S} \uparrow \text{uzg} \uparrow \text{b} \uparrow \text{ik} \uparrow \text{V} \uparrow \text{E} \uparrow \text{a} \uparrow \text{!} \uparrow \text{S} \uparrow \text{L}$	05.14
., $\text{TM} \text{qz} \uparrow \text{N} \uparrow \{ \text{g} \uparrow \text{z} \uparrow \text{S} \uparrow \text{b} \uparrow \text{ik} \uparrow \wedge \text{A} \uparrow \text{e} \uparrow \text{a} \uparrow \text{TM} \text{UN} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6}$	05.20
.i $\text{Yf} \uparrow \text{N} \uparrow \text{O} \uparrow \text{S} \uparrow \text{zh} \uparrow \text{a} \uparrow \text{O} \uparrow \text{Vf} \text{C}^{\text{TM}} \text{x} \uparrow \text{z} \uparrow \text{i} \uparrow \text{A} \uparrow \text{A} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6} \sim$	05.25
.Vf $\text{CCE} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6} \sim [\text{L}$	05.32
.i $@^{\text{M}} \text{(comment)} \uparrow \text{i} \uparrow \text{H} \uparrow 2 \uparrow \text{A} \uparrow \text{I} \uparrow \text{N} \uparrow \text{e} \uparrow \wedge \text{A} \uparrow \text{K} \uparrow \text{O} \uparrow \# \uparrow \sim \#$	05.34
.i $\text{C}^{\text{TM}} \text{g} \text{H} \sim \text{i} \uparrow 7 \ll \text{d} \uparrow \text{e} \uparrow \text{A} \uparrow \text{Turtle } \& \uparrow 3/4 \text{reset}$	05.39
.i $@^{\text{M}} \text{g} \text{H} \text{zero} = \text{z} \uparrow \text{O} \uparrow \text{!} \uparrow \text{I} \uparrow \text{A} \uparrow \text{r} \uparrow \text{y} \uparrow \text{kz} \uparrow \text{O} \uparrow \$ \text{r} = 0$	05.44
.i $@^{\text{M}} \text{S} \uparrow \text{x} \uparrow \text{z} \uparrow \text{6} \text{"for" } \text{J} \uparrow 15 \text{D} \uparrow 1 \text{Ofor } \$ \text{x} = 1 \text{to } 15$	05.52
.i $@^{\text{M}} [\wedge \gg = \text{z} \uparrow \text{A} \uparrow \text{r} \uparrow \text{y} \uparrow \text{kz} \uparrow \$ \text{r} = \$ \text{x} * (\$ \text{x} + 1) / 2$	06.01
.i $@^{\text{M}} \text{g} \text{H} \uparrow \text{, } \text{A} \uparrow \{ \text{" } \text{w} \uparrow \text{E} \uparrow \text{D} \uparrow \text{S} \uparrow \text{S} \uparrow \text{A} \uparrow \& \uparrow 3/4 \text{print } \text{O} \uparrow \text{fontsize } 18$	06.12
.i $@^{\text{M}} \text{C}^a = \text{z} \uparrow \text{A} \uparrow \text{y} \uparrow \text{kz} \uparrow \text{'r' } \text{6k} \uparrow \text{O} \uparrow \text{print } \$ \text{r}$	06.19
.i $@ \text{J} \uparrow (\text{D} \uparrow \text{M} \uparrow \text{O} \uparrow \text{P} \uparrow 15 \text{6k} \uparrow \text{O} \uparrow \text{A} \uparrow \text{Turtle } \text{O} \uparrow \text{forward } 15$	06.26

<pre> D 250 pixels D 6 zgzl 10 pixels D S SNIÆKOÃ Turtle 0go 10,250 .ì @J(</pre>	06.34
<pre> . • C™CªÆí @È%Ãk&¾ print xÓ" Turtle" </pre>	06.48
<pre> .ì C™g»nÆä™gOJ 2 → D executeÃ&¾<Ã Turtle &¾ "Wait 2" </pre>	06.54
<pre> .ì @Cªí Æÿkz\$ r gzi @Cª~] â´FÆ. eÃ "string" &¾ "print" </pre>	07.04
<pre> .VfC™Ã6Æ"Run" 'nÆä™gÃx6~ [l </pre>	07.13
<pre> .ì @CªkOž»Šº [CgŠ→ gzmSÅhZÆbatural numbersª Šº [CgŠ15 → </pre>	07.17
<pre> .ì k(D 15 6kO Turtle </pre>	07.27
<pre> . • %o SÅ! Æb kklëB,Æi l </pre>	07.32
<pre> ..~¿ </pre>	07.37
<pre> 0\B"while" äë~b kkl </pre>	07.40
<pre> .5™WE l»\B"for" 'gzl </pre>	07.44
<pre> .. \ VVfSe ~ 0gîÆw </pre>	07.47
<pre> 0[C»2 ñfD™WE l»\B"while" </pre>	07.54
<pre> qlnÆä™g»multiplication tableª ZhN»ŠZ®qñfD™WE l» "for" loop .K x6 </pre>	07.58
<pre> http://spoken-tutorial.org/What is a Spoken Tutorial.B Š-i z [06,, kl </pre>	08.03
<pre> .ì @Z Ü»• z6sgäÁ7t </pre>	08.08
<pre> . • MÑŠÆ™eByfleD l\ MÑi 7Bez ŠhZk0Æ\ M </pre>	08.12
<pre>Š• z6b kÁ7 </pre>	08.17
<pre> .ì C`ì \ xgzñfD™WE l», g kÁ7 </pre>	08.20
<pre> . • i Šì aF7 0• D™k0± í ÑyM </pre>	08.23
<pre> .K 6contact@spoken-tutorial.org nÆ] âYh× </pre>	08.27
<pre> .ì z »• z6â l- l- ul• z6b kÁ7 </pre>	08.36

Xī ~gYÐŠæÅ ICT =g&u(ò Æ ¹Fzb, zãñl ñl'] glizÅy# Ót	08.41
Nì [øö,, sf`gš] â¥h× 6ukl http://spoken-tutorial.org/NMEICT-Intro	08.48
Xī Åä•2it~ÈlœgzlE70> YzÀF»2 æ³⁴ kl t] ¹ c äf qñB, } gø	08.54