

Source Code Input:	Lexical Analyzed Result:	Parse Tree:
<pre>float mathresult1 = 3*4.3 + 2.1; float mathresult2 = 4.1 + 2*5.5; if (mathresult1 > mathresult2) { print("I just built some parse trees"); } int mathresult3 = 9*5.5 + 6;</pre>	<pre><keyword,float> <id,mathresult1> <op,+> <lit_int,5> <op,> <lit_float,4.3> <op,+> <lit_float,2.1> <op,></pre>	<pre>Parse Tree: ####Parse tree for line 1### ----parent node exp, finding children nodes: keyword node (root): keyword keyword has root node (token):float accept token from the list:float child node (internal): identifier identifier has child node (token):mathresult1 accept token from the list:mathresult1 child node (token):= accept token from the list:= child node (internal): math ----parent node math, finding children nodes: child node (internal): int int has child node (token):5 accept token from the list:5 child node (token):+ accept token from the list:+ child node (internal): math ----parent node math, finding children nodes: child node (internal): float float has child node (token):4.3 accept token from the list:4.3 child node (token):+ accept token from the list:+ child node (internal): math ----parent node math, finding children nodes: child node (internal): float</pre>
Current Processing Line	1	Quit
<div>NextLine</div>		

```
def bigtext_parser = text(text.master, "bigtext_parser", 100, 100)
self.bigtext_parser.grid(row=1, column=2, sticky=E)

#Label for current processing lines
self.current_num = Label(self.master, text="Current Processing Line: ")
self.current_num.grid(row=3, column=0, sticky=W)
self.current_num_counter = Entry(self.master, width=10)
self.current_num_counter.grid(row=3, column=0, sticky=E)

#two buttons for next line and quit
self.nextlinebutton = Button(self.master, text="Next Line", command=self.submitt_nextline)
```

Source Code Input:	Lexical Analyzed Result:	Parse Tree:
<pre>float mathresult1 = 3*4.3 + 2.1; float mathresult2 = 4.1 + 2*5.5; if (mathresult1 > mathresult2) { print("I just built some parse trees"); } int mathresult3 = 9*5.5 + 6;</pre>	<pre><keyword,float> <id,mathresult1> <op,+> <lit_int,5> <op,> <lit_float,4.3> <op,+> <lit_float,2.1> <op,> <keyword,float> <id,mathresult2> <op,+> <lit_float,4.1> <op,+> <lit_int,2> <lit_float,5.5> <op,></pre>	<pre>Parse Tree: parse tree building success! ####Parse tree for line 2### ----parent node exp, finding children nodes: keyword node (root): keyword keyword has root node (token):float accept token from the list:float child node (internal): identifier identifier has child node (token):mathresult2 accept token from the list:mathresult2 child node (token):= accept token from the list:= child node (internal): math ----parent node math, finding children nodes: child node (internal): float float has child node (token):4.1 accept token from the list:4.1 child node (token):+ accept token from the list:+ child node (internal): math ----parent node math, finding children nodes: child node (internal): int int has child node (token):2 accept token from the list:2 child node (token):+ accept token from the list:+ child node (internal): math</pre>
Current Processing Line	2	Quit
<div>NextLine</div>		

```
def bigtext_parser = text(text.master, "bigtext_parser", 100, 100)
self.bigtext_parser.grid(row=1, column=2, sticky=E)

#Label for current processing lines
self.current_num = Label(self.master, text="Current Processing Line: ")
self.current_num.grid(row=2, column=0, sticky=W)
self.current_num_counter = Entry(self.master, width=10)
self.current_num_counter.grid(row=2, column=0, sticky=E)

#two buttons for next line and quit
self.nextlinebutton = Button(self.master, text="Next Line", command=self.submitt_nextline)
```

Source Code Input:	Lexical Analyzed Result:	Parse Tree:
<pre>float mathresult1 = 3*4.3 + 2.1; float mathresult2 = 4.1 + 2*5.5; if (mathresult1 > mathresult2) { print("I just built some parse trees"); } int mathresult3 = 9*5.5 + 6;</pre>	<pre><keyword,float> <id,mathresult1> <op,+> <lit_int,3> <op,*> <lit_float,4.3> <op,+> <lit_float,2.1> <op,;> <keyword,float> <id,mathresult2> <op,+> <lit_float,4.1> <op,+> <lit_int,2> <op,*> <lit_float,5.5> <op,;> <keyword,if> <op,{> <id,mathresult1> <op,>> <id,mathresult2> <op,>> <op,>> <op,>></pre>	<pre>accept token from the list:5.5 parse tree building success! ####Parse tree for line 3### ----parent node if_exp, finding children nodes: child node (token):if accept token from the list:if child node (token):{ accept token from the list:{ ----parent node comparison_exp, finding children nodes: child node (internal): identifier identifier has child node (token): child node (token):mathresult1 child node (token):> accept token from the list:> child node (internal): identifier identifier has child node (token):mathresult2 accept token from the list:mathresult2 ----parent node if_exp, finding children nodes: child node (token):} accept token from the list:} child node (token):: accept token from the list:; } } parse tree building success!</pre>

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Current Processing Line: 3
NextLine
Quit

def bigtext_parser = TextWidget(master, background="white")
self.bigtext_parser.grid(row=1, column=2, sticky=E)

#label for current processing lines
self.current_num = Label(self.master, text="Current Processing Line: ")
self.current_num.grid(row=3, column=0, sticky=W)
self.current_num_counter = Entry(self.master, width=10) #used entry for current line number
self.current_num_counter.grid(row=2, column=0, sticky=E)

#two buttons for next line and quit
self.nextlinebutton = Button(self.master, text="Next Line", command=self.submitt_nextline)

```

Source Code Input:	Lexical Analyzed Result:	Parse Tree:
<pre>float mathresult1 = 3*4.3 + 2.1; float mathresult2 = 4.1 + 2*5.5; if (mathresult1 > mathresult2) { print("I just built some parse trees"); } int mathresult3 = 9*5.5 + 6;</pre>	<pre><lit_float,3.1> <op,*> <keyword,float> <id,mathresult2> <op,+> <lit_float,4.1> <op,+> <lit_int,2> <op,*> <lit_float,5.5> <op,;> <keyword,if> <op,{> <id,mathresult1> <op,>> <id,mathresult2> <op,>> <op,>> <op,>></pre>	<pre>child node (internal): identifier identifier has child node (token):mathresult2 accept token from the list:mathresult2 ----parent node if_exp, finding children nodes: child node (token):{ accept token from the list:{ child node (token):: accept token from the list:; } } parse tree building success! ####Parse tree for line 4### ----parent node if_exp, finding children nodes: child node (token):print accept token from the list:print child node (token):{ accept token from the list:{ child node (token):" accept token from the list:" child node (token):I just built some parse trees accept token from the list:I just built some parse trees child node (token):" accept token from the list:" child node (token):} accept token from the list:} child node (token):: accept token from the list:; } } parse tree building success!</pre>

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Current Processing Line: 4
NextLine
Quit

def bigtext_parser = TextWidget(master, background="white")
self.bigtext_parser.grid(row=1, column=2, sticky=E)

#label for current processing lines
self.current_num = Label(self.master, text="Current Processing Line: ")
self.current_num.grid(row=2, column=0, sticky=W)
self.current_num_counter = Entry(self.master, width=10) #used entry for current line number
self.current_num_counter.grid(row=2, column=0, sticky=E)

#two buttons for next line and quit
self.nextlinebutton = Button(self.master, text="Next Line", command=self.submitt_nextline)

```

Source Code Input:	Lexical Analyzed Result:	Parse Tree:
<pre>float mathresult1 = 3*4.3 + 2.1; float mathresult2 = 4.1 + 2*5.5; if (mathresult1 > mathresult2) { print("I just built some parse trees"); } int mathresult3 = 9*5.5 + 6;</pre>	<pre><lit_float,5.5> <sp,> <keyword,if> <sp,> <id,mathresult1> <op,> <id,mathresult2> <sp,> <sp,> <id,print> <sp,> <lit_str,I just built some parse trees> <sp,> <sp,> <keyword,int> <id,mathresult3> <op,> <lit_int,9> <op,> <lit_float,5.5> <op,+> <lit_int,6> <sp,></pre>	<pre>Parse tree building success: ####Parse tree for line 5### ----parent node exp, finding children nodes: keyword node (root): keyword keyword has root node (token):int accept token from the list:int child node (internal): identifier identifier has child node (token):mathresult3 accept token from the list:mathresult3 child node (token):= accept token from the list:= child node (internal): math ----parent node math, finding children nodes: child node (internal): int int has child node (token):9 accept token from the list:9 child node (token):+ accept token from the list:+ child node (internal): math ----parent node math, finding children nodes: child node (internal): float float has child node (token):5.5 accept token from the list:5.5 child node (token):* accept token from the list:* child node (internal): math</pre>
Current Processing Line:	<div>5</div> <div>Next Line</div>	<div>Quit</div>

```

self.bigtext_parser = Text(self.master, height=100, width=100)
self.bigtext_parser.grid(row=1, column=2, sticky=E)

#Label for current processing lines
self.current_num = Label(self.master, text="Current Processing Line: ")
self.current_num.grid(row=3, column=0, sticky=W)
self.current_num_counter = Entry(self.master, width=10) #used entry for current line number
self.current_num_counter.grid(row=2, column=0, sticky=E)

#two buttons for next line and quit
self.nextlinebutton = Button(self.master, text="Next Line", command=self.submit_nextline)

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