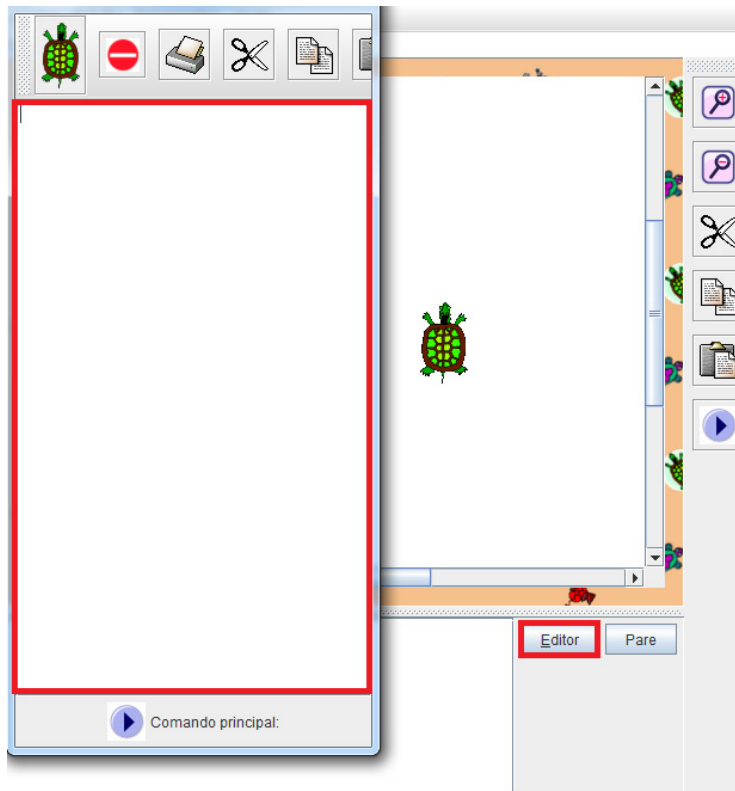


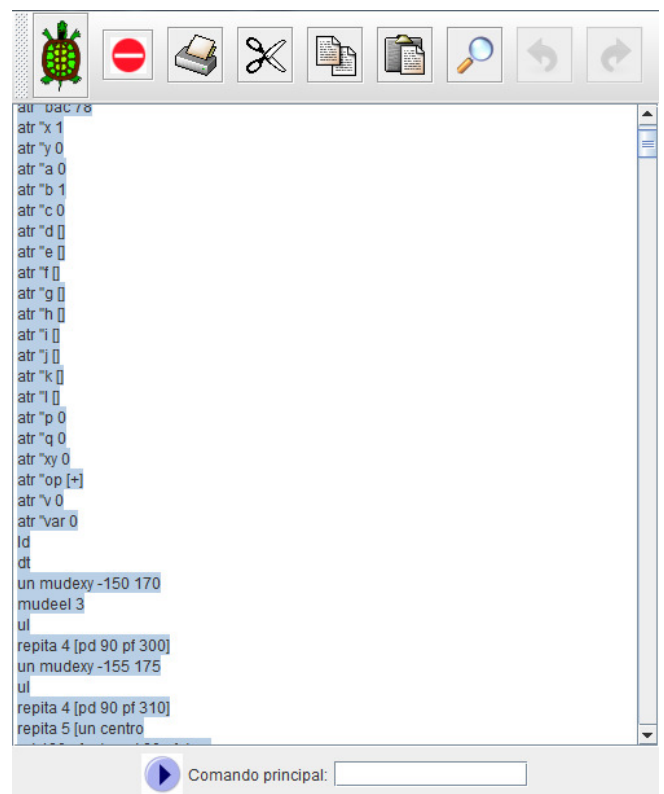
Criando uma calculadora:

1 - Abra o editor:



2 – Faça uma cópia do algoritmo no editor:

```
aprenda tela
#inicia a calculadora
atr "abc 115
atr "bca 50
atr "acb 23
atr "bac 78
atr "x 1
atr "y 0
atr "a 0
atr "b 1
atr "c 0
atr "d []
atr "e []
atr "f []
atr "g []
atr "h []
atr "i []
atr "j []
atr "k []
atr "l []
atr "p 0
atr "q 0
atr "xy 0
atr "op [+]
atr "v 0
atr "var 0
```



```

ld
dt
un mudexy -150 170
mudeel 3
ul
repita 4 [pd 90 pf 300]
un mudexy -155 175
ul
repita 4 [pd 90 pf 310]
repita 5 [un centro
pd 180 pf :abc pd 90 pf :bca
ul
execute [botão]
atr "bca :bca-45]
atr "abc 70
atr "bca 50
repita 5 [un centro
pd 180 pf :abc pd 90 pf :bca
ul
execute [botão]
atr "bca :bca-45
]
atr "bca 5
repita 3 [un centro
mundef 15
un pd 180 pf :abc-10 pd 90 pf :bca+60 pd 90
atr "bca :bca-45
rotule :x
atr "x :x+1]
atr "abc 25
atr "bca 50
repita 5 [un centro
pd 180 pf :abc pd 90 pf :bca
ul
execute [botão]
atr "bca :bca-45]
atr "abc 20
atr "bca 50
repita 5 [un centro
pd 180 pf :abc pd 90 pf :bca
ul
execute [botão]
atr "bca :bca-45]
atr "bca 5
repita 3 [un centro
mundef 15
un pd 180 pf :abc-5 pd 90 pf :bca+60 pd 90
atr "bca :bca-45
rotule :x
atr "x :x+1]
repita 4 [un centro
pf :acb pe 90 pf 132 pd 90
execute [botão]
atr "acb :acb-45]
atr "bca 5
repita 3 [un centro
mundef 15
pf 30 pe 90 pf :bca+60 pd 90
atr "bca :bca-45
rotule :x
atr "x :x+1]

```

```

atr "acb 65
repita 3 [un centro
pf :acb pe 90 pf :bac pd 90
execute [botão2]
atr "bac :bac-75]
un pf 50 pe 90 pf 205 pd 90
mudeel 2
ul
repita 2 [pf 20 pd 30 pf 2 pd 30 pf 2 pd 30 pf 260 pd 30 pf 2 pd 30 pf
2 pd 30]
un centro
pd 180 pf 105 pd 90 pf 65 pd 90
rotule [0]
pe 90 pf 61 pd 90
rotule [M+]
un centro
pd 180 pf 105 pd 90 pf 65 pd 90
pd 90 pf 40 pe 90
rotule [+/-]
pd 90 pf 50 pe 90
rotule [,]
pd 90 pf 45 pe 90
rotule [+]
pd 90 pf 45 pe 90
rotule [=]
un centro
pd 180 pf 60 pd 90 pf 126 pd 90
rotule [M-]
un centro
pd 180 pf 60 pe 90 pf 70 pe 90
rotule [-]
pd 90 pf 42 pe 90
rotule [%]
un centro
pd 180 pf 15 pd 90 pf 128 pd 90
rotule [MR]
un centro
pd 180 pf 15 pe 90 pf 70 pe 90
rotule [*]
pd 90 pf 43 pe 90
rotule [x²]
un centro
pf 30 pe 90 pf 128 pd 90
rotule [MC]
un centro
pf 30 pd 90 pf 70 pe 90
rotule [/]
pd 90 pf 38 pe 90
rotule [x½]
un centro
pf 73 pe 90 pf 53 pd 90
mundef 20
rotule [«]
mundef 18
pd 90 pf 68 pd 90 pf 2 pe 180
rotule [CE]
pd 90 pf 80 pe 90
rotule [C]
execute [clique]
fim

```

```
aprenda botão
ul
mudeel 2
repita 4 [pf 25 pd 30 pf 2 pd 30 pf 2 pd 30]
fim
```

```
aprenda botão2
mudeel 2
ul
repita 2 [pf 25 pd 30 pf 2 pd 30 pf 2 pd 30 pf 55 pd 30 pf 2 pd 30 pf
2 pd 30]
fim
```

```
aprenda clique
atr "mouse leiamouse
atr "x elem 1 posmouse
atr "y elem 2 posmouse
se :mouse=1 & :x>-80 & :x<-48 & :y>-115 & :y<-84 [atr "y 0 execute
[chipset]]
se :mouse=1 & :x>-35 & :x<-2 & :y>-115 & :y<-84 []
se :mouse=1 & :x>10 & :x<42 & :y>-115 & :y<-84 []
se :mouse=1 & :x>58 & :x<88 & :y>-115 & :y<-84 [atr "var 1 atr "op [+]
execute [termos]]
se :mouse=1 & :x>100 & :x<132 & :y>-115 & :y<-84 [execute [result]]
se :mouse=1 & :x>-80 & :x<-48 & :y>-70 & :y<-38 [atr "y 1 execute
[chipset]]
se :mouse=1 & :x>-35 & :x<-2 & :y>-70 & :y<-38 [atr "y 2 execute
[chipset]]
se :mouse=1 & :x>10 & :x<42 & :y>-70 & :y<-38 [atr "y 3 execute
[chipset]]
se :mouse=1 & :x>58 & :x<88 & :y>-70 & :y<-38 [atr "var 1 atr "op [*]
execute [termos]]
se :mouse=1 & :x>100 & :x<132 & :y>-70 & :y<-38 []
se :mouse=1 & :x>-80 & :x<-48 & :y>-24 & :y<8 [atr "y 4 execute
[chipset]]
se :mouse=1 & :x>-35 & :x<-2 & :y>-24 & :y<8 [atr "y 5 execute
[chipset]]
se :mouse=1 & :x>10 & :x<42 & :y>-24 & :y<8 [atr "y 6 execute
[chipset]]
se :mouse=1 & :x>58 & :x<88 & :y>-24 & :y<8 [atr "var 1 atr "op [*]
execute [termos]]
se :mouse=1 & :x>100 & :x<132 & :y>-24 & :y<8 []
se :mouse=1 & :x>-80 & :x<-48 & :y>20 & :y<52 [atr "y 7 execute
[chipset]]
se :mouse=1 & :x>-35 & :x<-2 & :y>20 & :y<52 [atr "y 8 execute
[chipset]]
se :mouse=1 & :x>10 & :x<42 & :y>20 & :y<52 [atr "y 9 execute
[chipset]]
se :mouse=1 & :x>58 & :x<88 & :y>20 & :y<52 [atr "var 1 atr "op [/]
execute [termos]]
se :mouse=1 & :x>100 & :x<132 & :y>20 & :y<52 []
se :mouse=1 & :x>-134 & :x<-102 & :y>-115 & :y<-84 []
se :mouse=1 & :x>-134 & :x<-102 & :y>-70 & :y<-38 []
se :mouse=1 & :x>-134 & :x<-102 & :y>-24 & :y<8 []
se :mouse=1 & :x>-134 & :x<-102 & :y>20 & :y<52 []
se :mouse=1 & :x>-80 & :x<-17 & :y>64 & :y<95 []
se :mouse=1 & :x>-4 & :x<55 & :y>64 & :y<95 []
se :mouse=1 & :x>70 & :x<122 & :y>64 & :y<95 [execute [tela]]
execute [clique]
fim
```

```

aprenda chipset
#chipset do programa
atr "z 0
atr "a 0
se :var=1 [
mudecl 7
rotule :xy
mudecl 0
atr "d []
atr "e []
atr "f []
atr "g []
atr "h []
atr "i []
atr "j []
atr "k []
atr "l []
atr "xy 0
atr "var 0
execute [display]]
se :q=1 [
mudecl 7
rotule :xy
mudecl 0
atr "a 0
atr "d []
atr "e []
atr "f []
atr "g []
atr "h []
atr "i []
atr "j []
atr "k []
atr "l []
atr "xy 0
atr "var 0
atr "q 0
execute [display]]
execute [display]
fim

```

```

aprenda result
#Processador do programa
se :z=1 [] [atr "z 1
se :op= [+] [
execute [casas]
mudexy 110-9*:p 120
mudecl 7 rotule :xy
mudecl 0
atr "xy :o+:xy
execute [casas]
mostre :p
mudexy 110-9*:p 120
rotule :xy
atr "q 1]
se :op= [/] [
execute [casas]
mudexy 110-9*:p 120
mudecl 7 rotule :xy
mudecl 0

```

```

atr "xy :o/:xy
execute [casas]
mudexy 110-9*:p 120
rotule :xy
atr "q 1]
se :op= [*] [
execute [casas]
mudexy 110-9*:p 120
mudecl 7 rotule :xy
mudecl 0
atr "xy :o*:xy
execute [casas]
mudexy 110-9*:p 120
rotule :xy
atr "q 1]
se :op= [-] [
execute [casas]
mudexy 110-9*:p 120
mudecl 7 rotule :xy
mudecl 0
atr "xy :o-:xy
execute [casas]
mudexy 110-9*:p 120
rotule :xy
atr "q 1]]
execute [clique]
fim

```

```

aprenda termos
#memória ram
atr "o :xy
fim

```

```

aprenda display
#placa de vídeo do programa
se :d=[] [atr "d :y atr "xy :d execute [casas] mudexy 110-9*:p 120
rotule :d
atr "xy :d
atr "a 1] [se :e=[] [se :a=1 [] [execute [casas] mudexy 110-9*:p 120
mudecl 7 rotule :xy mudecl 0
atr "e :y
atr "xy :d*10+:e
execute [casas] mudexy 110-9*:p 120
rotule :xy]] [se :f=[] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "f :y
atr "xy :d*100+:e*10+:f
execute [casas] mudexy 110-9*:p 120
rotule :xy] [se :g= [] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "g :y
atr "xy :d*1000+:e*100+:f*10+:g
execute [casas] mudexy 110-9*:p 120
rotule :xy] [se :h= [] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "h :y
atr "xy :d*10000+:e*1000+:f*100+:g*10+:h
execute [casas] mudexy 110-9*:p 120
rotule :xy] [se :i= [] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "i :y

```

```

atr "xy :d*100000+:e*10000+:f*1000+:g*100+:h*10+:i
execute [casas] mudexy 110-9*:p 120
rotule :xy] [se :j= [] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "j :y
atr "xy :d*1000000+:e*100000+:f*10000+:g*1000+:h*100+:i*10+:j
execute [casas] mudexy 110-9*:p 120
rotule :xy] [se :k= [] [execute [casas] mudexy 110-9*:p 120 mudecl 7
rotule :xy mudecl 0
atr "k :y
atr "xy
:d*10000000+:e*1000000+:f*100000+:g*10000+:h*1000+:i*100+:j*10+:k
execute [casas] mudexy 110-9*:p 120
rotule :xy]]]]]]]]
execute [clique]
fim

```

aprenda casas

#conta quantas casas o número exibido atualmente no display tem

```

atr "p 0
atr "v :xy
se :v<0 [menos :v atr "p :p+1]
enquanto [:v>1] [atr "v :v/10 atr "p :p+1]
atr "v :xy
repita 20 [se éinteiro? :v [] [atr "v :v*10 atr "p :p+1]]
fim

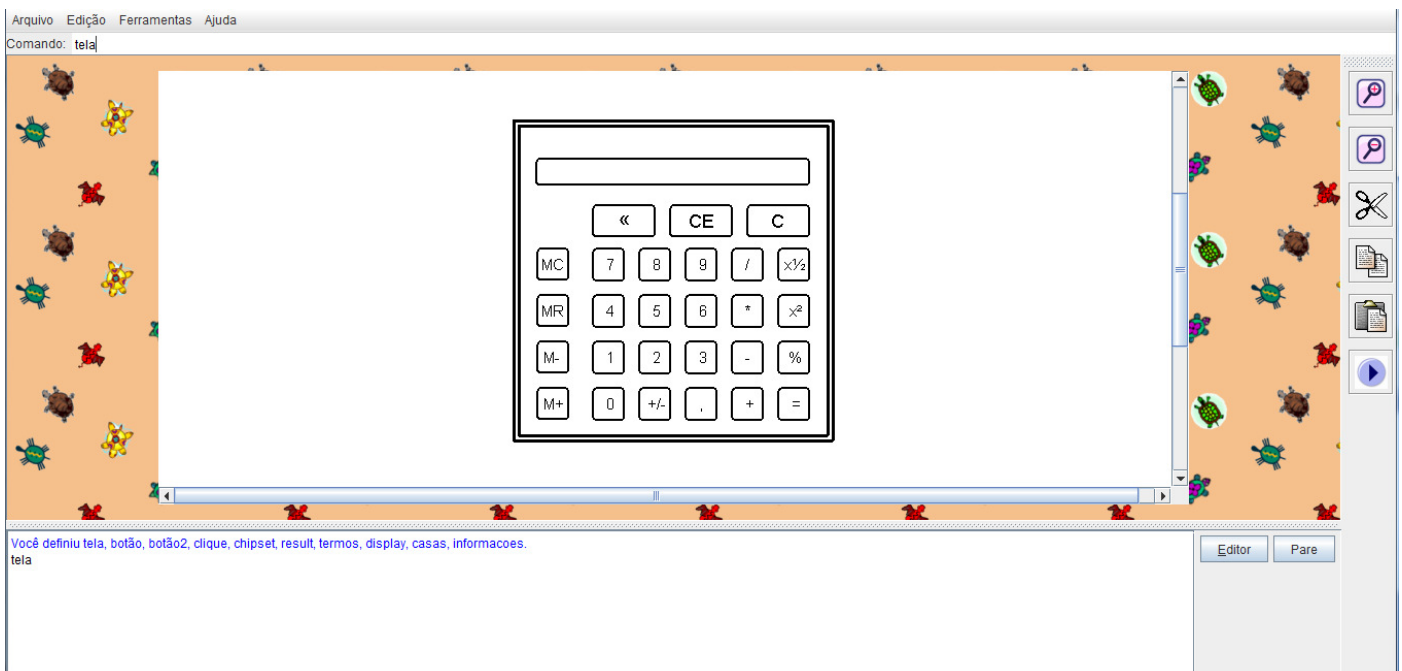
```

aprenda informacoes

#

fim

3 - Para "chamar" a função Calculadora, digite o comando "tela" na guia de comandos:



4 - Para terminar esta ação e voltar a digitar comandos, clique em "Pare".